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The BART Impact Program is a comprehensive, policy-oriented study and evaluation of the impacts of the San Francisco Bay Area's new rapid transit system (BART).

The program is being conducted by the Metropolitan Transportation Commission, a nine-county regional agency established by state law in 1970.

The program is financed by the U. S. Department of Transportation, the U. S. Department of Housing and Urban Development, and the California Department of Transportation. Management of the Federally funded portion of the program is vested in the U. S. Department of Transportation.

The BART Impact Program covers the entire range of potential rapid transit impacts, including impacts on traffic flow, travel behavior, land use and urban development, the environment, the regional economy, social institutions and life styles, and public policy. The incidence of these impacts on population groups, local areas, and economic sectors will be measured and analyzed. Finally, the findings will be interpreted with regard to their implications for the planning of transportation and urban development in the Bay Area and other metropolitan areas.

BART IMPACT PROGRAM
PUBLIC POLICY PROJECT
THE IMPACT OF BART ON
LAND USE AND DEVELOPMENT POLICY



SEPTEMBER, 1977

WORKING PAPER
PREPARED FOR
U.S. DEPARTMENT OF TRANSPORTATION
AND
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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PREPARED BY BOOZ, ALLEN & HAMILTON Inc.

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16. Abstract This Working Paper assesses the relationship between the construction and operation of BART and changes in local land use policy and resulting changes in actual land use and development. This study presents findings in four areas: (1) Local government involvement in BART station location and design decisions related to land use policy; (2) BART impacts on local government planning studies, rezonings and use of special development incentives or controls; (3) BART impacts on local government policy regarding BART-related joint development, particularly public improvements, redevelopment and marketing; (4) The impact of BART-related land use policy upon actual changes in land use and development.			
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**SAN FRANCISCO BAY REGION
CENTRAL AREA**

- BART:** The Bay Area Rapid Transit System
- Length:** The 71-mile system includes 20 miles of subway, 24 miles on elevated structures and 27 miles at ground level. The subway sections are in San Francisco, Berkeley, downtown Oakland, the Berkeley Hills Tunnel and the Transbay Tube.
- Stations:** The 34 stations include 13 elevated, 14 subway and 7 at ground level. They are spaced at an average distance of 2.1 miles: stations in the downtowns are less than one-half mile apart, while those in suburban areas are two to four miles apart. Parking lots at 23 stations have a total of 20,200 spaces. There is a fee (25 cents) at only one of the parking lots. BART and local agencies provide bus service to all stations.
- Trains:** Trains are from 3 to 10 cars long. Each car is 70 feet long and has 72 seats. Top speed in normal operations is 70 mph with an average speed of 38 mph including station stops. All trains stop at all stations on the route.
- Automation:** Trains are automatically controlled by the central computer at BART headquarters. A train operator on board each train can override automatic controls in an emergency.
- Magnetically encoded tickets with values up to \$20 are issued by vending machines. Automated fare gates at each station compute the appropriate fare and deduct it from the ticket value.
- Fares:** Fares range from 25 cents to \$1.45, depending upon trip length. Discount fares are available to the physically handicapped, children 12 and under, and persons 65 and over.
- Service:** BART serves the counties of Alameda, Contra Costa and San Francisco, which have a combined population of 2.4 million. The system was opened in five stages, from September 1972 to September 1974. The last section to open was the Transbay Tube linking Oakland and the East Bay with San Francisco and the West Bay.
- Routes are identified by the terminal stations: Daly City in the West Bay, Richmond, Concord and Fremont in the East Bay. Trains operate from 6:00 a.m. to midnight on weekdays, every 12 minutes during the daytime on three routes: Concord-Daly City, Fremont-Daly City, Richmond-Fremont. This results in 6-minute train frequencies in San Francisco, downtown Oakland and the Fremont line where routes converge. In the evening, trains are dispatched every 20 minutes on only the Richmond-Fremont and Concord-Daly City routes. Service is provided on Saturdays from 9 a.m. to midnight at 15-minute intervals. Future service will include a Richmond-Daly City route and Sunday service.* Trains will operate every six minutes on all routes during the peak periods of travel.
- Patronage:** Approximately 146,000 one-way trips are made each day. Approximately 200,000 daily one-way trips are anticipated under full service conditions.
- Cost:** BART construction and equipment cost \$1.6 billion, financed primarily from local funds: \$942 million from bonds being repaid by the property and sales taxes in three counties, \$176 million from toll revenues of transbay bridges, \$315 million from federal grants and \$186 million from interest earnings and other sources.

March 1978

*Sunday service began in July, 1978

SUMMARY AND FINDINGS

This Working Paper assesses the relationship between BART and local land use policy and between BART-related land use policy and actual changes in land use or development. The focus of the assessment has been three types of case study areas served by the BART system--urban core, urban residential and suburban areas. The time period analyzed was from 1962 to 1976--after the passage of the BART bond issue and after major decisions on route and station locations had been made. The study period included the detailed engineering and construction phases and three years of BART operating service.

1. THE IMPACT OF LOCAL LAND USE POLICY ON BART

Local land use policy may have played a significant role in pre-1962 decisions on the BART system configuration. However, most post-1962 decisions on station design or route alignment were based primarily on engineering and cost considerations. In the suburban areas (with one station per jurisdiction), post 1962 station and route modifications were reportedly worked out to the satisfaction of the local communities. In the more complex urban areas, though, community involvement in station and route modifications has often been characterized as "too little, too late." In these urbanized areas, inadequate BART-local coordination may have resulted in some missed opportunities (e.g., plazas in Oakland stations and open mezzanines in San Francisco stations requested by the cities were never implemented), and in some costly local adjustments (e.g., local bond issues and delays related to late decisions to underground BART in Berkeley, construction of an additional BART station (Embarcadero) in San Francisco, and an ambitious Market Street beautification and development project in San Francisco).

2. THE IMPACT OF BART AND PROJECTED LAND USE CHANGES ON LOCAL LAND USE POLICY

BART has caused some changes in local land use policy in every jurisdiction studied, but the changes were by far the greatest in the downtown areas. Initially, station area or corridor studies were conducted at almost all BART station and line locations. Substantial development and the creation of higher density activity centers were projected near BART stations and these projections immediately raised expectations of BART land use impacts. However, these projections did not generally result in the adoption of supportive local land use policy in the early years.

BART's impact on local land use policy was greatest in downtown San Francisco where, early in BART's planning stage, the City and downtown organizations sought to capitalize on BART and BART-related improvements to help realize local land use objectives. Growth near BART was encouraged downtown and discouraged in more sensitive areas through a combination of rezonings, development incentives, an additional tax-increment financed station, and a \$35 million street beautification program with numerous plazas along the City's main shopping and transit spine (Market Street).

BART's impact on local land use policy was also significant in the other BART-served downtown areas--Oakland and Richmond. Aggressive zoning policies were not pursued, but redevelopment and public improvement projects were proposed, expanded or modified as a result of BART. These projects would have been considerably smaller or not possible at all without BART, in that BART station investments qualified as the local matching shares for State and Federal redevelopment grants, relieving cities of the need to provide matching funds themselves.

BART's impact on land use policy was less significant in the urban residential neighborhoods of Oakland, San Francisco, Richmond and Berkeley. Early city efforts to increase densities near BART have been reversed because of community opposition. Zoning, redevelopment and public improvement proposals intended to capitalize on BART have been rejected. Instead, community residents have successfully lobbied for downzoning and neighborhood preservation.

BART's impact on local land use policy in the suburban areas of Walnut Creek and Fremont has been minimal in terms of redevelopment or public improvement policy. However, changes have been made in the general plans and zoning to permit and encourage increased densities and heights near the BART stations. In Walnut Creek, specific development incentives were adopted in the form of reduced parking requirements, and in Fremont, higher density zoning precluding single family development has been adopted near the station.

3. THE IMPACT OF BART-RELATED LAND USE POLICY ON LAND USE AND DEVELOPMENT

BART-related local land use policy changes have been one, but not the only, cause for subsequent changes in land use and development near BART stations, particularly in downtown areas.

In downtown San Francisco, there was a strong continuing demand for new office space during the period studied. In this environment, specific incentives for locating near BART or connecting to BART have modified some office development. More importantly, a combination of BART-related zoning controls and incentives, plus a \$35

million street beautification project and transit improvement program, which were heavily dependent on BART, have reportedly been in part responsible for supporting the continued growth of downtown (\$1.25 billion in office construction and 75,000 new office jobs between 1962 and 1977). In addition, this combination of BART-related policy has helped direct development pressures away from the sensitive areas of Nob Hill, Chinatown and North Beach and into the areas south of Market Street near the rapid transit stations (where market demand had previously been low).

Demand for office space was much weaker in downtown Oakland and almost non-existent in Richmond. However, partially by taking advantage of BART investments as local matching funds, both cities were able to leverage substantial additional Federal and State grants for major redevelopment and public improvement projects. These projects have, in turn, been used to support the first major new office and institutional development in downtown Richmond since the 1940's (a \$30 million Social Security Payments Center with 2,000 new jobs for Richmond and a new Kaiser Medical Building) and the first significant office and institutional construction in many years in the heart of downtown Oakland (Clorox and Wells Fargo at 12th Street, and Laney College at Lake Merritt). Unlike San Francisco, however, these two downtowns were not willing to discourage downtown development away from BART. Consequently, the effects of BART-related land use policy may have been somewhat neutralized by other local policy actions such as the encouragement of new regional office/shopping centers adjacent to freeways in both Oakland and Richmond.

In the urban residential areas of the Mission district, the Rockridge district and Richmond, the communities have so far been able to prevent what came to be viewed as undesirable and incompatible development. This is partially due to downzonings and new restrictions which were adopted in response to fears of BART. However, demand for BART-related development has also been weaker than initially projected.

In the suburban areas of Walnut Creek and Fremont, demand for BART-related development has also been weaker than projected. A major ten-story office building reportedly was built as the direct result of BART and BART-related zoning incentives in downtown Walnut Creek, but these incentives have since been repealed. In addition, some apartment development has reportedly occurred in conjunction with BART--but few residential rezonings were needed. Neither community has appeared to be that aggressive in its pursuit of new development near the stations, and higher density zoning alone has not yet been sufficient to make development happen.

4. POLICY IMPLICATIONS FOR LOCAL GOVERNMENTS CONSIDERING CAPITAL INTENSIVE MASS TRANSIT INVESTMENTS

Where suburban development patterns and freeway systems are established, where mass transit reinforces existing freeway and transit corridors and where urban residential areas feel threatened and downtowns are in transition, mass transit investments represent opportunities to affect development, but they will not automatically create new development patterns. Local policy-makers must decide whether and how to take advantage of these opportunities and they must be prepared to aggressively use local land use policy and implementation tools to reach their objectives.

Where public decisions are made to prevent land use impacts and preserve existing development patterns, BART experience indicates that a combination of restrictive zoning and neighborhood conservation strategies will probably be effective in supporting this objective. Where public decisions are made to capitalize on the development opportunities of mass transit, it will usually be necessary to pursue a broad range of supportive local land use policies to effect change--particularly if market demand is not very strong. These policies will most likely have to include a combination of zoning, public improvement and acquisition strategies.

For supportive local land use policy to be pursued at an appropriate time, local governments must be prepared to act in a timely and decisive manner. Policy-makers need to have better access to transferable experience and lessons learned in other jurisdictions which have been affected by mass transit investments. In addition, special assistance or incentives may be needed to assure that policy-makers have a more solid basis of action and choice of tools than did the Bay Area communities in the 1960's. This need for incentives is likely to represent a serious challenge since many of the incentives of the 1960's are no longer available (matching redevelopment, public improvement and land acquisition grants, 701 planning grants, etc.). Specific examples of supportive land use policy include:

- Realistic land use and development projections are needed to determine the location of demand potential and opportunities for targeting public policy actions; but these projections must be closely tied to alternative sets of public policies.
- Broad-based planning studies of station areas and transit corridors are important as a vehicle for developing consensus and involving important elements of the residential and business communities; however, Federal funding for these studies is declining and scarce resources may have to be allocated by a regional authority.

- Responsive rezonings are needed to encourage appropriate development near mass transit; they may also be needed to discourage certain types of development away from mass transit and to encourage neighborhood preservation.
- An effective system of special development incentives and controls may be needed to encourage specific relationships between development and mass transit; but these controls must reflect realistic development economics as well as public desires.
- Cost-effective public improvements are frequently needed to provide a supportive environment for development and to demonstrate a public commitment to the area; however, fiscal problems have increased and special programs and incentives may be needed.
- Redevelopment and land acquisition policies are critical in both developed and undeveloped areas if adequate parcels are to be assembled without causing hardships; however, new programs may be needed since redevelopment funds are no longer available in the same form as in the 1960's and community development block grants tend to be distributed to smaller scale and shorter term projects.
- Joint development marketing can be an effective tool for influencing site location decisions; however, it must represent more than good faith bargaining, and it needs to be supported by other government policies.

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I. INTRODUCTION

1. THE BART IMPACT PROGRAM

The BART Impact Program (BIP) is a comprehensive, policy-oriented study and evaluation of the impacts of the new San Francisco Bay Area Rapid Transit (BART) system. The BIP covers the entire range of potential rapid transit impacts, with major projects covering impacts on traffic flow, travel behavior, land use and urban development, the environment, the regional economy, social institutions and life styles, and public policy. The incidence of these impacts on population groups, local areas and economic sectors is being measured and analyzed.

2. THE PUBLIC POLICY PROJECT

The Public Policy Project can be viewed as a major integrating chapter in the overall BART Impact Program. Each BIP project measures and evaluates BART's impacts on a variety of social, economic, transportation and community factors. The Public Policy Project, in turn, measures not only the direct and indirect impact of BART on public policy and the policy-making process, but it also assesses the secondary effects of these public policy impacts on BART.

More specifically, the Public Policy Project includes an examination of:

- . The policy-making process and behavior that occurred locally (neighborhood, city-wide, region-wide) due to BART.
- . The public policy change or decision that resulted from this interaction between BART and the community.
- . The implications these findings have for local governments considering or pursuing substantial mass transit investments.

This paper specifically assesses the relationship between the construction and operation of BART and changes in local land use policy. This study included analysis of the following areas:

- . Local government involvement in post 1962 BART station location and design modifications related to land use policy.

- BART impacts on local government planning studies, rezonings and use of special development incentives or controls.
- BART impacts on local government policy regarding BART-related joint development, particularly public improvements, redevelopment and marketing.
- The impact of BART-related land use policy upon actual changes in land use and development.

3. ORGANIZATION OF THIS PAPER

This Working Paper presents findings and conclusions about the relationship between BART and local land use policy in three major sections. First, it presents background material on study objectives and approach and on existing land use policies, trends and BART expectations. Second, it outlines findings related to the four basic areas of study described above. Finally, the paper develops conclusions for each study area and general policy implications for other metropolitan areas planning rapid rail transit investments.

II. OBJECTIVES AND METHODOLOGY

This chapter begins with a general description of the task objectives and the major research questions. It then characterizes the three distinct time periods of BART development and the seven case study areas chosen as a focus for this impact assessment. The chapter concludes by describing the study approach used to measure the land use policy impacts of BART.

1. THE OBJECTIVE OF THIS STUDY WAS TO ASSESS THE IMPACT OF BART ON TWO BASIC AREAS OF LAND USE POLICY

To assess the impact of BART on local land use policy in the Bay Area, the study team selected two basic areas in which local governments express land use policy. Specific research questions were posed for each of these areas. The two policy areas and corresponding research questions were:

(1) The Impact Of BART On Local Planning And Zoning Studies And Subsequent Changes In The General Plan Or The Zoning Code Or Map

- Have local governments conducted special studies or developed special area plans for BART station areas or corridors?
- Have local governments altered their official general plans or area plans as a result of BART?
- Have local governments altered land use controls to encourage or discourage development near BART stations?
- Have local governments rezoned land near BART stations in an effort to encourage or facilitate development or in an effort to preserve existing character?

(2) The Impact Of BART On Local Public Improvement Programming, Redevelopment And Marketing

- Have local governments planned or modified redevelopment projects and their financing to capitalize on BART?

- Have local governments planned or modified public improvement projects and their financing to capitalize on BART?
- Have local governments used the existence of BART as a tool to influence facility and capital improvement decisions of other public jurisdictions or private entities?

In addition to these two areas of land use policy, involvement of local governments in the modification of BART plans after 1962 was investigated.

After assessing the relationship between BART and local land use policy, the study team assessed the impact of land use policy responses on actual changes in land use and development using additional material collected as part of the Land Use and Urban Development Project.¹

As a basis for isolating BART impacts on land use policy, the No-BART Alternative (NBA) was used--defined by MTC as the transportation system judged most likely to have evolved in the Bay Area had the decision to build BART not been made in 1962.² The NBA includes no changes in the Bay Area freeway and street system. But bus transit service was assumed at its 1973 peak with some improvement in frequencies but no new routes. No major capital investments for transportation were assumed in the absence of BART except 15 buses for use on MUNI's Mission Street corridor.

2. THIS ASSESSMENT OF BART IMPACTS ON LOCAL LAND USE POLICY COVERS THREE PRINCIPAL PHASES OF BART DEVELOPMENT DURING THE PERIOD 1962 TO 1976

To assess the impact of BART on local land use policy, the study team focused on three different time periods related to BART development.

¹This material included interview notes as well as Working Papers on the Housing Industry (Berkeley: Metropolitan Transportation Commission, September, 1977) and the Office Construction Industry (Berkeley: Metropolitan Transportation Commission, August, 1977).

²See Metropolitan Transportation Commission, "Rationale and Specification of the No-BART Alternative," Working Note (Berkeley, Metropolitan Transportation Commission, September, 1976).

(1) The BART Planning And Initial Construction Phase
--1962 To 1968

This phase covers the period following the passage of the 1962 BART bond issue. Marin, San Mateo and Santa Clara Counties had already withdrawn from the District. BART had agreed to build the MUNI Market Street and West Portal Avenue subways in San Francisco; the District had agreed to locate its headquarters in Oakland and route all lines through that city, and it had agreed to a station in downtown Richmond. During this period, full-scale engineering design was completed and stations or routes were modified in Richmond, San Francisco, Oakland, Walnut Creek, Berkeley and Fremont.

Some land use studies were initiated during this phase, but most of the local government focus was on station location, route alignment and design (elevated, surface, sub-surface), and on public improvement and redevelopment planning and programming related to BART. Most expectations of BART impacts on land use were based on conventional professional wisdoms and on second-hand knowledge of impacts in other cities.

(2) The BART Construction Phase--1968 To 1972

This period covers the more visible construction and early operations of BART during which track laying began, car tests were conducted, fare structures were established, and revenue service was scheduled.

During this phase, numerous BART station area and corridor studies were completed by local jurisdictions. Many of these studies projected significant BART impacts and development potentials related to land use. Local governments and communities began to react to these projections with more specific modifications to zoning, development review criteria and redevelopment projects. In addition, there were more frequent incidents of specific BART-related public and private development projects requiring local government policy decisions.

(3) The BART Operations Phase--Post 1972

This phase covers the period following the initiation of revenue service and, therefore, includes the expansion of BART service to its 1976 frequency (6 a.m. to midnight on weekdays with six to twenty minute headways) and 1976 ridership (about 135,000 passengers per day of operation).

During this phase, there were continuing station area studies, as well as BART extension studies. Some projections of BART impacts on land use were being reduced or extended over a longer period of time (particularly those related to accessibility effects of BART in residential areas), while others were being increased (particularly those related to parking facilities). There were limited requests for rezonings, but in most cases, local land use policy related to BART was focused on marketing and lobbying activities directed at other decision-makers.

3. THIS ASSESSMENT OF BART IMPACTS ON LOCAL LAND USE POLICY FOCUSES ON THREE TYPES OF CASE STUDY AREAS IN THE BART DISTRICT

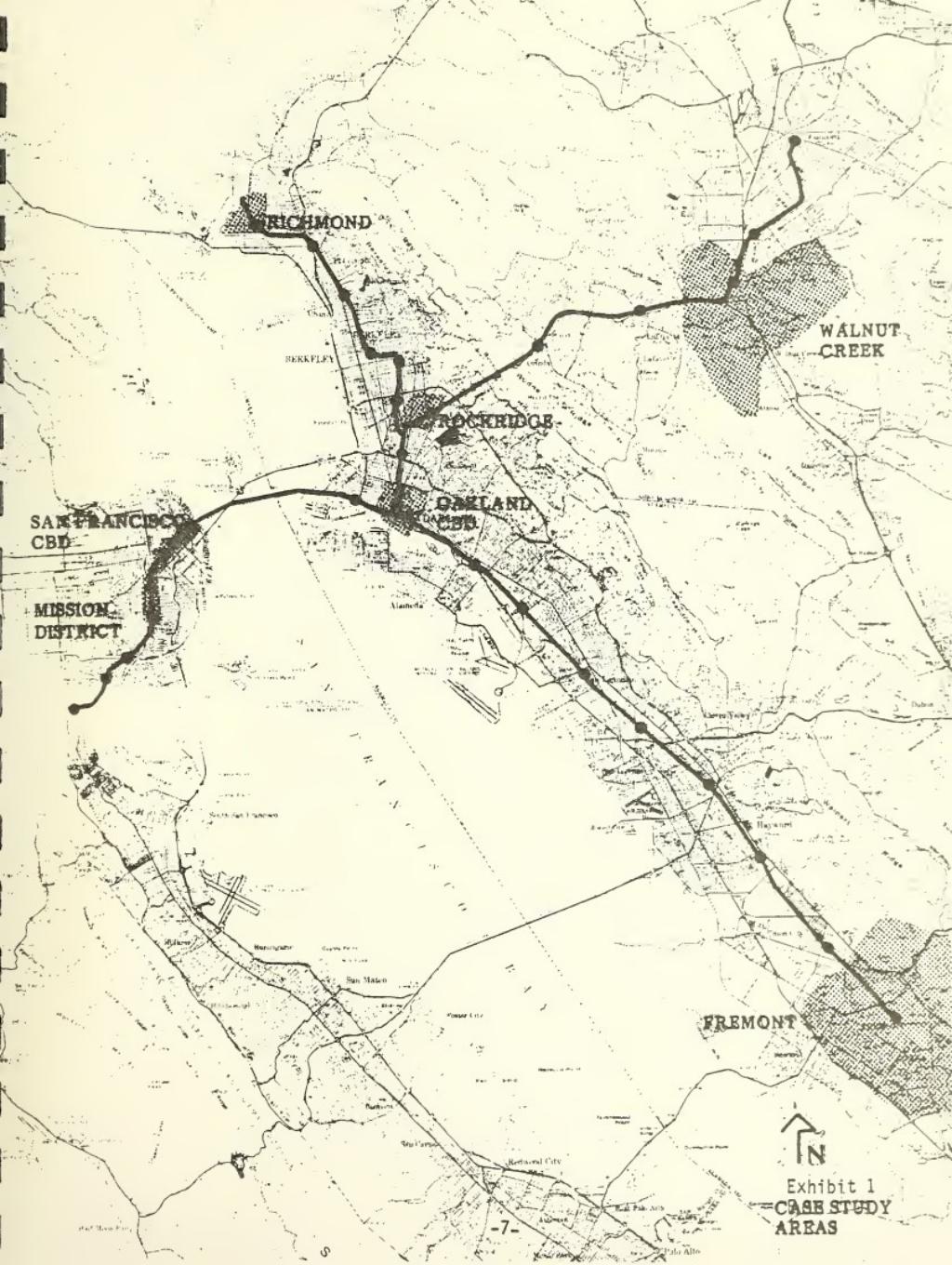
Although this assessment covers the entire BART District, the study team focused principally on the BIP program-wide case study areas.³ The case studies include two urban core areas, three urban residential areas and two suburban residential areas shown in Exhibit I and described below.

(1) Urban Core Areas

BART was explicitly designed to bring travelers (particularly commuters) from outer areas of the metropolitan region to the two major downtowns of San Francisco and Oakland.

- San Francisco CBD--represents a typical regional center for consideration by other metropolitan areas. It is the economic and commercial center of the BART service area and the principal commuter destination. It also serves as a regional cultural, entertainment and specialty services center. At the time BART was approved, there was considerable public concern over the continued viability of downtown and whether or not it would follow the decentralization trends of older eastern cities. However, during the late 1960's and early 1970's, there was

³ As described in Booz, Allen & Hamilton, Public Policy Project--Study Design and Project Implementation Plan (Berkeley: Metropolitan Transportation Commission, May, 1977).



a tremendous boom in downtown construction and office expansion, such that public concern shifted to preservation of the scale and character of San Francisco.

. Oakland CBD--is representative of an older downtown core area, with office, commercial, governmental and cultural facilities also serving a regional market. It is now at the center of the BART system in terms of accessibility. Political tradeoffs in BART's planning demanded that all BART lines pass through downtown Oakland in order to stabilize the relative economic advantage of San Francisco versus Oakland. At the time BART was approved, the public was concerned about the rapid decline of downtown Oakland, particularly because of increasing business/commercial vacancies and the movement of business up Broadway away from Jack London Square. During the 1970's, some office construction in the City Center Project and along Broadway has caused some resurgence. While significant relative to past trends, it is minor relative to San Francisco, and public concern is still oriented to the encouragement of growth and development downtown.

(2) Urban Residential Areas

Much of the BART service area is in highly urbanized areas of both the East Bay and San Francisco. BART was intended to provide expanded public transit accessibility for the residents of these areas to employment opportunities throughout the region.

. Richmond--is an older established city, representative of an urban sub-center where an economically declining core area has been the focus of redevelopment projects. It has a largely black and lower to middle income population and is located at one of the four terminals of the BART system. At the

time BART was approved, Richmond's population had declined by 40% since World War II and much of Richmond's commercial district was marginal or vacant. During the late 1960's there was considerable clearance and redevelopment activity but much of downtown remains vacant land. Significant development has occurred near the BART station in the form of a new Social Security Payments Center employing 2,000, a Kaiser medical facility and a housing development for the elderly. Most commercial and residential expansion has taken place near the new Hilltop Regional Shopping Center near the freeway and away from the central business district. As a result of this development, redevelopment and some annexations, Richmond's population has grown by 14% since 1960.

The Rockridge District of Oakland-- is a middle income single family neighborhood with a small business district. The district is representative of a relatively stable, low density urban residential neighborhood. At the time BART was approved, Rockridge had not undergone the middle income exodus and transition common to many other Oakland neighborhoods. During the late 1960's and early 1970's, the Rockridge area became increasingly desirable, rehabilitation has occurred and there has been increasing demand for residential and commercial development, often to the dismay of local residents.

The Mission District of San Francisco--is a lower to middle income urban residential area with good bus transit service and a large commercial area which was declining in the early 1960's. The district is representative of a densely populated urban residential neighborhood. It contains a high proportion of older multi-family structures and Spanish American households. At the time

BART was approved, the minority population was increasing. During the late 1960's and early 1970's, the district as a whole has become increasingly desirable as a residential neighborhood and there has been some pressure for increased residential and office/commercial development or redevelopment along the Mission corridor and near the BART stations.

(3) Suburban Residential Areas

Just as BART was intended to serve commuter destinations in the San Francisco-Oakland area, it was also meant to serve the commuter originations in the more distant suburban areas that began their greatest growth in the 1950's and 1960's.

- Walnut Creek--is representative of a middle to upper income, auto oriented, single family, suburban bedroom community. The city lies at the intersection of two major freeways in Contra Costa County and has excellent auto accessibility. At the time BART was approved, Walnut Creek had a population of about 10,000, but by 1970 the population had grown to 40,000. Over 50% of the work force commutes to San Francisco or Oakland. Most residential and commercial development took place in the 1960's prior to BART service. Since that time the City has not actively sought development and, with the increase in anti-growth, anti-highrise, anti-apartment sentiment, it now administers extensive controls over the type and location of development.
- Fremont--is representative of a middle income planned suburban community with its own employment base and with only a small fraction of its workers commuting to the central downtowns of Oakland and San Francisco. At the time BART was approved, Fremont had a population of about 50,000 and an employment base of about 12,000. By 1970, Fremont had grown to an estimated 120,000 people and 51,000 jobs.

4. THE STUDY APPROACH INCLUDED A REVIEW OF DOCUMENTS AS WELL AS KEY INFORMANT INTERVIEWS TO TRACE BART IMPACTS ON LOCAL LAND USE POLICY

Written documentation was used to trace local land use policy decisions wherever possible. This documentation included:

- Reports from other BART Impact Program projects.
- Local land use plans and plan amendments.
- Planning Department and Commission reports.
- Consultant reports, including station area and corridor studies and economic projections.
- Capital improvement plans and programs.
- Redevelopment Agency documents and plans.
- Marketing brochures.
- Newspaper clippings.

Key informant interviews were used to fill information gaps and to provide expanded perspectives on BART-related local land use policy. Key informants included:

- Planning Department staff.
- Redevelopment Agency staff.
- Local elected officials and commissions.
- Representatives of neighborhood organizations and special interest groups.
- Realtors, developers and representatives of the financial community.
- Community representatives, merchants and property owners.

Document review and key informant interviews focused on factual data as well as three subjective aspects of BART-related land use policy decisions:

- What groups or individuals were involved in the decision, what was their position, and what did they stand to gain or lose?

- What combination of factors influenced the land use policy decisions and to what extent were BART or BART expectations a factor?
- What effect did local land use policy have on actual land use and development patterns?

This working paper attempts to trace BART-related local land use policy decisions, to determine the various actors and influences involved (including BART) and to assess the relationship of these policy decisions to eventual changes in land use. A more detailed study of actual land use changes and their relationship to BART was conducted concurrently with the Public Policy Project (the Land Use and Urban Development Project). However, its delayed completion meant that most of the specific findings and conclusions could not be incorporated into this report as well as the Public Policy Project Final Report.

III. THE LAND USE POLICY ENVIRONMENT

This chapter begins with a general description of the land use policy environment in each of the three types of areas studied: urban core, urban residential and suburban. The chapter then outlines the changes in expectations of BART impacts on land use in each area. The chapter concludes by describing the land use environment as it specifically relates to BART.

1. THE GENERAL LAND USE POLICY ENVIRONMENT HAS CHANGED SIGNIFICANTLY OVER THE PAST FIFTEEN YEARS AND HAS ALSO VARIED CONSIDERABLY IN DIFFERENT JURISDICTIONS IN THE BAY AREA

In the past fifteen years, the land use policy environment has been characterized by increased community participation, increased community resistance to large-scale private and public redevelopment and a growing acceptance of broader zoning controls and incentives.

These trends in the land use policy environment are an important ingredient in assessing BART's impact on land use policy, and further, on land use itself. In the early 1960's, there was only limited citizen participation in local land use policy decisions. Most studies were conducted by "professionals," there was little community interest or feedback, and most land use policy decisions were made by appointed or elected officials and special interest groups. Therefore, most studies of potential BART impacts on land use were directed to these decision-makers rather than to community residents and organizations. By the late 1960's, this land use policy environment had changed in the more urban areas and, by the 1970's, it had also changed in the more suburban areas. Differences in the policy environments among these areas are described below.

(1) In The Urban Core Areas, Property Owners And Tenants Expressed A Growing Desire For More Governmental Assistance In The Revitalization Of The Downtowns

BART-related beautification and redevelopment projects, as well as broadly supported revitalization programs have received continuing public support.

Although the policy environments in San Francisco and Oakland have some commonalities, major differences are also apparent, particularly related to the economic climates:

In San Francisco, it has been noted that, "The impetus for rapid transit seemed to arise not primarily from a concern for better transportation to serve the region, but rather from a desire to rejuvenate the downtown retail business and financial districts of San Francisco."¹ Downtown office and commercial growth in San Francisco has now been so substantial in the late 1960's that demands for further controls on new buildings (particularly on building heights) and for greater protection for developed areas (e.g., Jackson Square, Nob Hill) has increased. Because of this environment the City has been able to pursue a mix of controls and incentives supporting BART-related changes in land use.

In Oakland, the City had been trying to encourage growth at almost any cost for some time, yet little growth had occurred. This environment has reduced the ability to use development restrictions throughout the CBD, and there has been little opportunity for balancing controls and incentives to direct any land use changes related to BART.

(2) In The Urban Residential Areas, There Have Generally Been Increasing Demands For Conservation And Rehabilitation Policies

In the urban residential areas, dissatisfaction with redevelopment, the urban riots of 1967-68, growing community involvement and politicization, and numerous other factors contributed to a growing resistance to large scale private and public redevelopment in the late 1960's. These same factors also contributed to increasing demands for neighborhood self-determination, conservation and retention of the existing scale and character of many areas in the late

¹ Public Affairs Report, Institute of Governmental Studies, Volume XIV, June, 1975, No. 3, University of California Berkeley; an article by Stephen Zwerling, later confirmed by discussions with corporate leaders active at the time.

1960's and early 1970's. These trends were particularly evident in the Mission district of San Francisco and the Rockridge district of Oakland, where community opposition to BART-related public and private redevelopment led to subsequent downzoning in both areas. This same trend was also evident in the urban residential/urban sub-center of Richmond, where a BART-related downtown redevelopment project and downtown plan were partially redirected to maintain lower density housing and neighborhood services. However, in Richmond there was also strong support for downtown revitalization policies.

The same trend was also apparent in the non-case study urban residential neighborhoods affected by BART (Berkeley, Hayward, other parts of Oakland and San Francisco, etc.) and in other urban residential communities throughout the Bay Area. However, it was much less evident in those areas where change was less visible or less the result of outside factors. In the BART impacted communities, the policy environment itself may also have been directly affected by BART. As a visible and likely "external threat," BART proved an excellent organizing tool and was an important catalyst in stimulating increased citizen involvement in land use issues.

(3) In The Two Suburban Areas Studied, Pro-Growth And Development Policies Of The 1960's Have Now Been Replaced By More Restrictive Or Managed Policies Toward Development

In the two suburban residential areas studied, opposition to large scale private or public redevelopment began to occur in the 1970's. Opposition stemmed primarily from a general resistance to "growth" and a desire to maintain the status quo. Both Fremont and Walnut Creek were becoming suburban communities in the 1960's--Fremont in accordance with a detailed plan, Walnut Creek on a more ad hoc basis. In both communities, concerns about the "costs of growth" and increasing urbanization have fostered a growing trend of "wait and see" in the 1970's. Proposed developments are more carefully reviewed and aggressive marketing has been moderated. These trends were generally paralleled in the non-case study suburban communities along the BART line (Concord, Lafayette, Orinda, etc.).

2. EXPECTATIONS OF BART IMPACTS ON LAND USE WERE QUITE HIGH IN THE 1960'S BUT HAVE BEEN REDUCED SINCE BART BEGAN OPERATION

Expectations of BART's impact on accessibility and travel behavior also affected BART's impact on local land use policy. BART's potential land use impacts were heavily marketed in the early 1960's--marketing which was then reinforced by numerous economic feasibility and land use studies during the latter 1960's. After revenue service was initiated, however, many of these raised expectations were not met and there has recently been some reassessment of potential impacts.

During the 1960's, BART was generally expected to cause substantial changes in land use and development patterns. Representatives of BART, promoters of BART, delegations from cities such as Toronto, and professionals from many fields were projecting major BART impacts on land use. Slide shows of Toronto rapid transit stations showed medium density homes "before" and the inevitable high rise cluster "after" rapid transit development.² Realtors were stating that "rapid transit creates and enhances property values like nothing else on earth."³ Planners and economists were projecting significant density increases near BART stations.⁴ Expectations varied widely and included:

- Rapid transit will revitalize cities (by attracting office and commercial use).
- Rapid transit will spell the city's doom (by increasing the exodus of the middle class).
- Rapid transit will control suburban sprawl (by encouraging concentration near stations).
- Rapid transit will foster suburban sprawl (by expanding the commuter shed and by encouraging decentralization of office/commercial uses).
- Rapid transit will improve the quality of urban residential neighborhoods (by improving accessibility and reducing congestion).

²As reported in local newspapers.

³G. Warren Heenan, citing experience in Toronto, as quoted in local newspapers.

⁴E.g., Development Research Associates, Economic Analysis, GNP, Rapid Transit Corridor Study Area, 1967; Okamoto-Liskamm, An Urban Design Plan for Mission Street, 1967.

- Rapid transit will force the exodus of lower income households (by increasing property values).

Differences in these expectations of BART impacts upon land use in different areas are described below.

(1) In The Urban Core Areas, Expectations Of BART Impacts On Growth And Revitalization Were High From The Early 1960's On

In the urban core areas, early private and public projections of substantial BART land use impacts greatly raised expectations for downtown growth and revitalization.

In downtown San Francisco, these expectations, in part, led to the Market Street Development Project, the downtown plan, and to some revisions to the Yerba Buena Center Redevelopment Project. As noted in one report, "The citizens were sold on BART for one purpose (congestion relief) while the principal instigators had another purpose in mind (shaping the development of the region for the economic gain of the downtown areas)."⁵

In the case of downtown Oakland, merchants were originally opposed to BART due to concerns about construction impacts,⁶ but raised expectations, in part, led to strong Redevelopment Agency support for BART and an expanded City Center Redevelopment Project.

(2) In The Urban Residential Areas, Expectations And Fears Of Potential BART Impacts Increased In The Late 1960's

In the Mission district of San Francisco, these expectations or fears arose in response to an economic analysis of potential BART impact⁷ and an urban design plan⁸ which translated these projected impacts into visual images of development concentrations near the BART stations. At the time these studies were initiated,

⁵ Public Affairs Report, op. cit., as affirmed by McGill/Jacobs discussions.

⁶ Interviews with ex-Oakland Mayor, John Houlahan and others.

⁷ Development Research Associates, Economic Analysis, GNRP, Rapid Transit Corridor Study Area, 1967.

⁸ Okamoto-Liskamm, An Urban Design Plan for Mission Street, 1967.

these expectations were viewed as "opportunities." By the time the studies had been completed, the political environment had changed and development expectations became viewed as threats to the neighborhood.

A similar trend can be noted in the Rockridge district of Oakland where expectations or fears arose again in response to an economic analysis of BART impact⁹ and a private development proposal which again translated those projected impacts into a visual image of development concentrations near the BART station. Again, the study was intended to focus on "opportunities" but these were viewed as threats by the community residents and small businesses fearful of change.

In Richmond, expectations were again raised in response to an economic analysis of BART impact.¹⁰ One result was a city-supported neighborhood effort to collectively control and capitalize on the development potential of BART.¹¹

Expectations in other urban residential communities (Hayward and other parts of San Francisco and Oakland) did not play as important a role because they were neither as high nor as widely publicized and studied as in the three case study communities. The exception is Berkeley where raised expectations had a similar effect as in the Mission, Rockridge and Richmond districts.

(3) In The Suburban Areas, Expectations Of BART-Related Development Were High In The 1960's But They Have Now Receded

In the suburban residential areas, early private and public projections of substantial BART-related land use changes greatly raised expectations (and later fears) for high density residential and office development.

⁹ As reported in the newspaper, the Gruen & Gruen consultant presentation to the community predicted that "with no policy changes, perhaps 1,000 to 1,400 privately financed apartments will be built in Rockridge, and new commercial establishments will tend to increase rents to the point where some of the existing more marginal establishments will be priced out of the market." According to the experts, "there is going to be a great demand for high rise apartments and planned townhouse communities."

¹⁰ Development Research Associates, Land Use and Marketability Study, Downtown Redevelopment Project, 1968.

¹¹ Richmond City Planning Department, A Dynamic Approach to Land Assembly and Development, 1970.

In Walnut Creek, these expectations and economic projections¹² were translated, first into zoning incentives for high rise development near the station, and then into elaborate development controls and review procedures as the community became concerned about potential negative impacts.

In Fremont, expectations were never really supported by economic projections, but substantial increases in station area densities were still adopted¹³ on the basis of generally accepted planning principles.

In other non-case study suburban areas, expectations often followed the same trends as above and were usually supported by economic analyses (Lafayette, Concord).

3. POLICY-MAKERS HAVE BECOME INCREASINGLY AWARE THAT PROJECTED BART IMPACTS ARE NEITHER AUTOMATIC NOR NECESSARILY IMMEDIATE

While proximity impacts at BART stations (plazas, parking lots) may be direct and immediate, the theoretical impacts on surrounding land use due to improved accessibility and pressures for higher densities must be viewed as indirect and subject to many factors.

While BART may have substantial effects on access and travel behavior in the region, and while professionals believe that changes in accessibility and travel behavior contribute to changes in land use, there are a number of other important factors affecting BART impacts on land use which have become increasingly apparent to policy-makers.

Before reviewing our specific findings on the land use policy impacts of BART in Chapter IV, it is important to provide a broader perspective of how these factors affecting land use interrelate.

(1) Rapid Transit Is But One Component Of A Large Transportation System Affecting Accessibility And Travel Behavior In The Bay Area

This transportation system of highways, bridges, local transit systems, etc., changes in response to a new rapid transit system (as documented in other working

¹² Duncan & Jones, City of Walnut Creek, BART Station Area Plan, 1973; City Planning Department, Core Area Plan, 1975.

¹³ BART Area General Plan Amendment and Final Environmental Impact Report, 1974.

papers of this project) but can also change irrespective of rapid transit. These changes can reinforce accessibility and travel behavior trends resulting from BART, but they can also negate them. It is the net result which is important in projecting potential land use impacts due to accessibility and travel behavior.

(2) Accessibility And Travel Behavior Are But One Component Of A Larger Network Of Market Factors Affecting The Demand For Different Land Uses In Different Areas

While accessibility and travel behavior (as affected in part by rapid transit) are important factors affecting land use demands, it is the net effect of these and other factors--including the economic climate, the cost of land, etc.--which is important in projecting potential demand for land use changes at different locations.

(3) The Potential Demand For Different Land Uses Is But One Component Of A Network Of Factors Affecting The Actual Land Development Process

While the potential demand for development is important, such factors as land ownership, politics, and local land use policy can have a critical impact on actual land use and development patterns.

(4) Local Land Use Policy Is One Component Of The Complex Public Policy Network That Often Plays A Critical Role In Determining The Direction And Extent Of BART Impacts On Land Use

Local land use policy, although one of the most important factors affecting BART impact on land use, is often difficult to trace in the complex policy-making process:

- . Policy-making is an incremental process, often disjointed, and usually resulting from issues and problems rather than perceived opportunities.
- . Land use policy-making is a pluralistic process, often involving conflicting special interests, and usually resulting in political compromises rather than decisive actions.

- Land use policy-making is quite subjective, it is often non-budgetary, and it usually follows local socio-political views on neighborhood preservation, growth, etc.

It is this factor, local land use policy, which is the subject of this working paper.

IV. LAND USE POLICY IMPACTS OF BART

This chapter begins with a general description of the involvement of local governments since 1962 in efforts to alter BART's alignment, station design or operation. The chapter then traces the impacts of BART on local land use policy in two areas:

- Planning and Zoning--BART's impact on whether studies were done, or what their conclusions were, and on how they were implemented through general plan and zoning changes.
- Joint Development Policy (Redevelopment, Public Improvements, Marketing)--BART's impact on whether projects were implemented, on what the principal elements were, and on how they were financed and implemented.

1. DECISIONS TO MODIFY STATION LOCATIONS AFTER 1962 OFTEN INVOLVED LAND USE POLICY QUESTIONS

Most station location and route decisions were made prior to 1962 but, in each of the case study areas, some modifications of stations and routes remained serious issues through 1965 and were usually related to land use policy questions.

Before considering the impact of BART on the three specific types of land use policy, it is important to trace any local government involvement in modifications to BART design or operations to determine if any of these actions were related to local land use policy. As noted in a recent study conducted for the Council on Environmental Quality:¹

"Modifying the transit investment can change its land use effects. For instance, if the stations are close together, the land use effects will be smaller around each one than if they are far apart. The route of the system and the location of the stations will determine how it reinforces or interferes with existing neighborhoods. If the line is built ahead of development, growth may occur at its outlying stations rather than along its route. Finally, the station design and the provision of parking are most important factors."

¹Urban Systems Research & Engineering, Inc., The Growth Shapers, the Land Use Impacts of Infrastructure Investments, 1976.

In the case of BART, most station and route decisions had been made prior to the passage of the Bond Issue in 1962. These decisions and their impacts are not the subjects of this paper. However, in most cities, some questions remained open after 1962 and until 1965, during the detailed engineering design phase:

"During the remainder of 1962 and 1963, BART engineers, working at a swift pace, carried designs for elevated and subway portions of right-of-way to a critical point. In mid-year of 1963, the engineering consortium began to demand coordinating decisions of communities through which it was to pass."²

(1) In The Urban Core Areas, Local Government Involvement In The BART Design And Engineering Phase Affected Decisions But It Was Felt To Be Too Little, Too Late

In Oakland and San Francisco, Technical Advisory Committees were formed in response to a concern that BART station design and route location were being determined primarily by BART engineers.³

In San Francisco, local government involvement came too late to effectively deal with the issues of shallow mezzanines along Market Street and an Embarcadero station.

- . In the case of the shallow mezzanines supported by the City, coordination came too late and it has been reported that:⁴

"San Francisco lost the opportunity for open air mezzanines and an interesting, stimulating, sheltered, transit-served shopping complex at the mezzanine level, because it did not, at a sufficiently early stage, appreciate and organize to realize the

² An Analysis of BART-Related Joint Development in San Francisco, op. cit., p. 8.

³ Interviews with Norm Lind, Oakland Planning Director; James McCarthy, former San Francisco Planning Director; and others.

⁴ An Analysis of BART-Related Joint Development in San Francisco, op. cit., p. 13

potential advantages possible from an innovative BART station design."

- In the case of the Embarcadero station at the foot of Market Street, the City belatedly realized that this station was essential to serve the downtown financial district and the Golden Gateway Redevelopment Project which proposed the transformation of the old produce market section into a high-rise office/residential complex. At that time, the first planned BART stop was almost one mile from the foot of Market Street. Adamant BART refusals to consider a station at Davis Street led to the City's 1966 decision to pursue station construction through the redevelopment and tax increment bond process.

In Oakland, local government involvement also came too late to effectively resolve several important BART design issues related to land use:

- The City Council was not successful in having BART rerouted to serve the proposed Jack London Square redevelopment area.
- The City was financially unable to provide more extensive plaza development at the 19th Street station and a Telegraph Square tie in.
- After lengthy debate and delays, the City and BART were able to incorporate BART into the median of the proposed Grove Shafter Freeway.
- The City was partially successful in its efforts to modify the 12th Street station.

As was the case in San Francisco, most of these issues arose too late and the City was not sufficiently prepared to significantly affect BART design.

(2) In Urban Residential Areas, More Limited Community And Local Government Efforts Usually Came Too Late To Affect BART Design Decisions

In the Mission district of San Francisco and in the Rockridge district of Oakland, there was little community awareness of BART until the design and engineering phases were near completion. Mission community groups reportedly attempted to deal with BART officials on the design of the 24th Street station but were frustrated in their efforts. Local governments, in both cases, had been more concerned with station design and impacts in the downtown areas and BART was seen only as an opportunity to increase densities and provide focal points in the residential/commercial districts. However, issues were not aired early, BART became viewed as an external threat, and in both cases, the lack of better BART/City/community station area planning in the early stages can be viewed as the partial cause of subsequent downzonings and denials of applications for private and public redevelopment.

In Richmond, there was also little community awareness of BART during the engineering and design phase. However, Richmond had only one station⁵ and there was much more and earlier political and city staff involvement in the location and design issues. In fact, BART itself was reportedly delayed due to the extensive negotiations over whether the station would be located in the 4th/6th Street area (a deteriorated section in the heart of the CBD) or at the 16th Street location (a site along the existing railroad right-of-way between downtown and the Civic Center). The result of Richmond's early involvement in the design and engineering phase was that the City was able to influence most station and alignment decisions in a way which decision-makers felt was beneficial to the community:

- . The alignment was altered to follow an existing railroad right-of-way which already functioned as a community barrier known as the "iron triangle" (part 3 of this chapter details the favorable grade separation agreements Richmond was able to get from BART which reduced the impact of this existing barrier).

⁵The original location of this station in downtown Richmond (rather than along the freeway) had been a BART concession that was apparently critical to receiving a majority of the five member Contra Costa County Board of Supervisors for the Bond Issue.

The station design was modified to incorporate the Nevin Pedestrian Mall linking the station and the redevelopment project (an overhead station-mall designed for the Redevelopment Agency, however, was rejected by BART as too costly).

The station location was changed to an area where it would result in less housing demolition and where it could be better incorporated with the land use plans of the City.

In most other urban residential communities (with the exception of Berkeley) the situation was similar to Mission and Rockridge and there was little local government involvement in the BART design and engineering phase. In Berkeley, however, there was substantial community involvement in the major issue of whether BART would be above or below grade. Although BART rejected subway construction as too costly, the City was able to gain passage of a major local bond issue in time to achieve the underground subway it desired.

(3) In Suburban Residential Areas, Most Station Design And Alignment Decisions Appear To Have Been Made To The Satisfaction Of The Communities Involved

In both Walnut Creek and Fremont, station location and alignment disputes occurred. However, each jurisdiction had only one station and a small governmental structure and local officials appeared to have been involved early enough to reach satisfactory agreements. The same appeared to be true in other suburban areas.

In Walnut Creek, for example, the initial alignment along a railroad right-of-way (with the station in the existing downtown area) was "violently opposed by downtown merchants"⁶ who felt that BART would seriously disrupt business. The alignment was subsequently changed and the station location moved to a site adjacent to the freeway and outside of the existing downtown.

⁶ Interview with Jay DeLau, Walnut Creek Chamber of Commerce.

2. BART-RELATED PLANNING AND ZONING STUDIES WERE UNDERTAKEN IN ALMOST EVERY JURISDICTION, AND CHANGES WERE SUBSEQUENTLY ADOPTED IN THE GENERAL PLAN OR ZONING

When one speaks of local land use policy, the first thing that comes to mind is usually the local government's General Plan or the Zoning Map. In all the Bay Area communities studied, BART-related land use studies of both BART station area and BART corridors were conducted by local planners as well as outside consultants. Projected proximity and accessibility effects of BART were the basis for numerous changes to the General Plan or Zoning Map and Code. BART's impact on local planning and zoning policy in each of the three types of communities studied (downtown, urban residential and suburban) are summarized in the following sections. More detailed descriptions of impacts are included in accompanying exhibits.

(1) Downtown Areas Were Better Prepared To Conduct The Early Advance Planning Which Helped Them Take Advantage Of BART

In the two downtown core areas studied, there tended to be earlier advance planning related to BART, leading to significant impacts on major public and private improvement and redevelopment projects. Zoning changes were also adopted to try to encourage development near BART stations. In San Francisco, these zoning incentives were accompanied by more restrictive measures elsewhere in the CBD to control the direction of growth. But in Oakland, incentives were less effective because there was no parallel effort to restrict development elsewhere (Exhibit II displays specific BART-related changes in downtown planning and zoning policy).

In downtown San Francisco, BART played a major role in a number of plans leading to important revisions to the Zoning Code and Map in 1965-68. In 1962, downtown San Francisco development was being guided by the 1955 downtown plan and by relatively unrestrictive zoning permitting higher densities than almost any other zoning code in the nation. Both the 1955 Downtown Plan and the downtown zoning provided for a financial district which was restricted to the north of the existing Market Street transit spine and which was focused at Montgomery and California Streets. However, concern was growing about downtown congestion and about office building intrusion into residential and commercial neighborhoods to the north of Market Street (North Beach, Nob Hill). Although no specific station area studies were conducted, BART was an important factor in the development of a new downtown plan and subsequent

EXHIBIT II
 Public Policy Project
 BART'S IMPACT ON LOCAL ZONING AND PLANNING POLICY
 DOWNTOWN AREAS

<u>Case Study Area</u>	<u>Intended Impact Of Planning And Zoning Changes</u>	<u>BART's Impact On Local Studies And Planning Policy</u>	<u>BART's Impact On Local Zoning Policy</u>
1. San Francisco-CBD	<ul style="list-style-type: none"> • Facilitate continued financial district expansion, but redirect it away from established commercial/residential neighborhoods. • Maximize access to and use of rapid transit. • Revitalize and beautify Market Street. • Reduce traffic congestion. 	<ul style="list-style-type: none"> • 1963 Downtown Plan--focused on transit spine development along Market Street and transit access; was initiated in anticipation of BART. • 1971 Urban Design Plan--stressed a transit corridor and transit station focus for downtown, provided for higher height limits near transit. • Market Street Corridor And Design Plan--stressed transit focus and street beautification; plan resulted in formation of the Market Street Development Project and passage of \$24 million Market Street Bond Issue. 	<ul style="list-style-type: none"> • 1966 Downtown Zoning Study--emphasized role of rapid transit and use of zoning to promote greatest densities near BART; resulted partially from 1963 downtown plan. • 1968 Zoning Code Changes--adopted floor area ratio bonuses (20%) for BART access and smaller bonuses for BART proximity; eliminated parking requirements in buildings near BART. • 1968 Zoning Map Amendments--South of Market zoning districts near BART were changed from industrial to office; office densities away from BART were lowered.
2. Oakland-CBD	<ul style="list-style-type: none"> • Revitalize downtown and increase development. • Encourage development near BART. 	<ul style="list-style-type: none"> • 1966 Central District Plan--focused on greater transit and pedestrian orientation and increased densities and public improvements near BART; included many detailed BART-related recommendations for plazas and development. • Rapid Transit Corridor Study--projected increased development opportunities in proposed redevelopment projects near BART. 	<ul style="list-style-type: none"> • 1968 Zoning Amendments--reduced parking requirements near BART; did nothing to discourage development away from BART or provide BART-related bonuses or increased densities.

zoning changes. These changes restricted financial district expansion into the threatened neighborhoods, while encouraging expansion around the BART stations and into the south of Market Street areas where developers had previously been reluctant to build.

In downtown Oakland, BART had an impact on the downtown plan but had little effect on zoning. In 1962, planned station locations in downtown Oakland included the three stations along the existing Broadway transit spine. At that time, planning and zoning in Oakland encouraged office and commercial development throughout a broad area of central Oakland. No specific station studies were conducted, but BART had significant impacts on the 1966 Central District Plan and the Redevelopment Agency conducted studies in the BART corridor. These plans became the basis for important redevelopment and public improvement projects. Key informants in Oakland report these studies were able to adequately incorporate projected BART impacts and propose ways to capitalize on BART-related opportunities.⁷ However, few significant changes in zoning or land use regulation occurred since there were few additional incentives that could be provided.

(2) Planning Policy In Urban Residential Areas Generally Responded To Community Fears Of Projected BART-Related Development

In the three urban residential areas studied, BART-related planning tended to come later in the 1960's and early 1970's, primarily in response to community fears of increased densities in these already developed areas. Planning studies aimed at capitalizing on BART opportunities generally had the reverse effect. Where land use policies were changed, they tended to become more restrictive than those that existed before BART. In the Mission district of San Francisco, downzoning and the defeat of a redevelopment project resulted from community opposition to City/consultant studies showing the opportunities for increased development. The same thing happened in the Rockridge district of Oakland, where proposed private redevelopment also helped solidify neighborhood opposition to City proposals. In the case of Richmond, the response was somewhat different since the community hoped BART would help revitalize the declining core area and help a faltering redevelopment project. Even here, community groups opposed high

⁷ Norm Lind and Frank Earhardt, Planning Department; John Houlihan, former Mayor.

density residential development proposals in already developed neighborhoods. Exhibit III includes a more detailed description of these BART impacts.

In the Mission district of San Francisco, BART-related studies and proposals prompted community rejection of redevelopment and adoption of reduced zoning and height limits. In 1962, planned station locations in the Mission district included the 16th and 24th Street stations along the existing Mission Street transit spine. Planning and zoning provided for substantial office/residential/commercial development all along the Mission Street corridor. BART-related development and urban design studies were conducted and became a rallying point for successful community efforts to actually reduce the existing zoning and height limits. In addition to these Mission Street corridor studies and zoning changes, other preservation-oriented studies and down-zonings have occurred in the area and would have differed without BART. However, efforts to develop specific development review guidelines for the two BART station areas have not yet been successful.

In the Rockridge district of Oakland, BART-related studies eventually led to downzoning and increased citizen involvement in the review of development proposals near BART. In 1962, the planned Rockridge station was located in the freeway median adjacent to a developed low density neighborhood and commercial district whose zoning provided for considerable increases in residential and commercial densities. Because of the potential BART-related demand that was anticipated, two station area studies were conducted--the first by City staff, the second by a consultant in response to community demands for more in depth study.

- . In the first study, surveys were made; roundtable discussions were held with realtors, economists, developers, lenders, community representatives, architects and public officials; and the planning staff then determined a range of alternative planning objectives in each area. Rockridge was singled out as the "station area most attractive to investors in residential building."⁸

⁸ Oakland City Planning Department, BART Impact, Five Oakland Station Areas, 1969, p. 22.

EXHIBIT III

**BART'S IMPACT ON LOCAL ZONING AND PLANNING POLICY
URBAN RESIDENTIAL AREAS**

Case Study Area	Intended Impact Of Planning And Zoning Changes	BART's Impact On Local Studies And Planning Policy	BART's Impact On Local Zoning Policy
1. Mission District (San Francisco)	<ul style="list-style-type: none"> Compromise between those who favored large-scale redevelopment and those who favored preservation 	<ul style="list-style-type: none"> 1966 Rapid Transit Corridor Study--was initiated after several neighborhood organization and political leaders began to push for redevelopment/rehabilitation efforts in the Mission; projected substantial increases in residential densities near BART. 1966 Redevelopment Plan--focused on rehabilitation and BART-related renewal; plan eventually defeated because new community leaders were fearful of redevelopment. 1971 Urban Design Study--proposed major intensifications of building activity near the BART stations; responsible for major community involvement and pressure to reduce the higher station area height limits recommended in City-wide urban design plans. 	<ul style="list-style-type: none"> 1972 Height Zoning--reduced height limits from 240 feet to 100 feet at the 16th Street station and from 160 feet to 100 feet at the 24th Street station at the corner site only; reduced allowable building heights everywhere but allowed greatest heights near BART stations.
2. Rockridge District (Oakland)	<ul style="list-style-type: none"> City Council wanted to encourage development near BART; neighborhood wanted to preserve existing character. 	<ul style="list-style-type: none"> 1969 BART Impact Study Of Five Oakland Station Areas--recommended high density urban subcenter at Rockridge to capitalize on BART 1974 Rockridge Station Area Study--evaluated five development alternatives; neighborhood successfully lobbied for adoption of "Preservation As Is". 1967 Station Design Study--Redevelopment Agency proposed overhead station and shopping mall; rejected by BART, however, elements of the plan incorporated into City's Nevins Mall project. 	<ul style="list-style-type: none"> Three month zoning moratorium--adopted after 1974 study. 1975 Downzonings--reduced allowable commercial and residential densities near BART. Design Review Committee--gave citizens building permit review authority.
3. Richmond	<ul style="list-style-type: none"> Redevelopment and revitalization of downtown-first as regional shopping area, later as regional service center 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> 1966 Policy plan for the Iron Triangle--developed largely because of anticipated BART-related development; proposed higher density offices near BART with a plaza/pedestrian scheme for the rapid transit corridor.

The second study was a result of considerable community pressure for more in-depth analysis of planning alternatives.

Both studies emphasized BART-related development opportunities which, in turn, generated considerable neighborhood fear and eventual downzonings and development restrictions.

In the Richmond area, BART-related planning studies were conducted, but few, if any, changes in zoning or development review procedures were instituted. In 1962, the Richmond station location had been planned in the older downtown area where planning and zoning had provided for considerable increases in residential and commercial densities. Once the 16th Street BART station location had been selected, downtown and rapid transit corridor studies were conducted both by the Redevelopment Agency and by a group of citizens in combination with the Planning Department. However, development demand has been slow to occur near BART and there has been no real pressure to change the zoning code or to develop new land use regulations. This is partially the result of the City's approving a major regional shopping center and residential office complex near the freeway interchange and far from BART and the CBD. Freeway and automobile access also appears to play a much more important role in planning than does BART.

(3) Suburban Areas Made Some, But Not Dramatic, Changes In Planning And Zoning Policy Due To BART

In the two suburban areas studied, BART-related planning tended to come even later (1972-76) than in the other two types of communities. Zoning changes, where adopted, tended to encourage high density residential and commercial development near BART. In Walnut Creek, zoning incentives have since been repealed because of increased community opposition to high rise buildings and apartments. In Fremont, zoning incentives are still in effect and low density development near BART is precluded. However, controversy over the adverse fiscal impacts of development is now increasing. Exhibit IV includes more detailed descriptions of BART planning and zoning impacts in suburban communities.

In suburban Walnut Creek, early studies led to incentives to encourage development near BART, but these incentives have now been reduced due to community concern about high rise development. The current station location was zoned for low density residential use and

EXHIBIT IV
 Public Policy Project
BART'S IMPACT ON LOCAL ZONING AND PLANNING POLICY
SUBURBAN AREAS

Case Study Area	Intended Impact Of Planning And Zoning Changes		BART's Impact On Local Studies And Planning Policy	BART's Impact On Local Zoning Policy
	Planning	Zoning		
1. Fremont	Increase densities near BART	<ul style="list-style-type: none"> 1969 General Plan Amendment--extended commercial district to the BART stations. 1974 BART Area General Plan Amendments--increased residential densities near BART; established density floors to preclude development at lower densities 	<ul style="list-style-type: none"> 1969 and 1974 Zoning Changes--implemented General Plan changes 	1969 and 1974 Zoning Changes--implemented General Plan changes
2. Walnut Creek	Initially intended to increase densities near BART; now more ambivalent.	<ul style="list-style-type: none"> 1972 General Plan--recommended high density, high-rise residential and office development near BART. 1973 BART Station Area Plan--proposed that high-rise office development be restricted to BART Station area; was never officially adopted. 1975 Core Area Plan--advocated high-rise development near BART; reduced parking standards where building occupants can use transit. 	<ul style="list-style-type: none"> 1972 Zoning Amendments--reduced parking requirements in buildings constructed near BART; was later repealed after one 10 story building was constructed and community opposition to high-rise development increased. 	

was adjacent to a commercially zoned area. Until 1972, development in downtown Walnut Creek was guided by the 1965 Core Area Plan⁹ which "was formulated during an era when the desirability of automobiles was seldom questioned and when a mass transit system for the Bay Area was far from a reality."¹⁰ This 1965 plan had a railroad right-of-way with the BART station in the middle of the existing commercial district. BART-related planning studies and subsequent zoning changes in the early 1970's recommended the encouragement of high-rise residential and commercial development near BART. These incentives have recently been reduced by the adoption of more restrictive controls and the repeal of specific incentives.

In the suburban Fremont area, two General Plan amendments were adopted to try to take advantage of BART by raising the allowable densities near the BART station. In 1962, the Fremont station location had not been decided, and most planning and zoning were related to freeways rather than transit. While there have been significant BART-related changes in Fremont's General Plan, they are not yet viewed as very effective or meaningful in the overall development program for the City.

3. REDEVELOPMENT AND MAJOR PUBLIC IMPROVEMENT PROJECTS WERE UNDERTAKEN AND/OR MODIFIED AS A RESULT OF BART IN EVERY JURISDICTION STUDIED

In addition to planning and zoning, local governments express land use policy through actions affecting joint development with BART. Actions include those directly affecting public redevelopment and capital improvement projects as well as those indirectly affecting the development decisions of other public and private entities. In every jurisdiction studied, BART had a number of specific impacts--particularly on redevelopment and public improvement projects. These impacts are summarized for each of three types of communities (downtown, urban residential and suburban) and described in more detail in accompanying exhibits.

⁹ Ruth & Krushkov, 1965 Core Area Plan.

¹⁰ Proposed Core Area Plan, November, 1975.

(1) The Most Significant BART-Related Redevelopment And Public Improvement Project Activity Occurred In Major Downtown Areas

In the two downtown areas studied, new redevelopment projects were made more financially feasible, and already proposed redevelopment projects were modified to incorporate BART stations. In each case the project's financing was changed due to the increase in local non-cash credits, and the planned land uses and marketing were also affected. Major street beautification projects were also proposed and implemented as a direct result of BART. Exhibit V outlines specific BART impacts in San Francisco and Oakland downtown areas.

In downtown San Francisco, downtown redevelopment projects were faltering and Market Street was declining in appearance and in retail/office activity. All five of the City's street car lines converged on Market Street and competed for right-of-way with other vehicles with diminishing success. Because of the arrival of BART, both the Yerba Buena Center and Golden Gateway Redevelopment Projects were expanded to incorporate BART stations, the latter to incorporate the new tax-increment financed Embarcadero station that BART had initially refused to fund. The Market Street transit lines were undergrounded on a level above BART and a major Market Street beautification project was funded with a new \$24 million bond issue and Federal assistance.

In downtown Oakland, BART enabled the City to use increased local credits to expand the downtown City Center Redevelopment Project and create the Peralta Project for a junior college campus. In 1962, no downtown redevelopment project had been approved, and the Broadway spine was a congested, declining, retail shopping street. While some planned redevelopment projects would have gone forward without BART, the City Center Redevelopment Project was expanded to incorporate the BART station, and a Broadway Beautification Project was implemented.

In terms of joint development marketing efforts in the core areas, the San Francisco and Oakland Redevelopment Agencies have actively used BART as a marketing tool, but their success appears to be limited to Federal clients who are often subject to GSA site selection criteria, heavily emphasizing public transit access. BART has also played a moderate role in local government marketing efforts directed to entities proposing office uses. BART has reportedly played a much more limited role in joint development marketing related to private developers of hotel, convention, high density, residential and regional retail uses.

EXHIBIT V
 PUBLIC POLICY PROJECT
 BART'S IMPACT ON PUBLIC IMPROVEMENT
 AND REDEVELOPMENT POLICY
 DOWNTOWN AREAS

Case Study Area	Intended Impact On Land Use	BART's Impact On Redevelopment Policy	BART's Impact On Public Improvement Policy
1. San Francisco	<ul style="list-style-type: none"> - Revitalize Market Street and expand downtown into marginal industrial and produce market areas. 	<ul style="list-style-type: none"> - Embarcadero BART Station--partially using tax increment bonds because BART refused to fund; station added to provide better transit access to major redevelopment project. - Golden Gateway and Yerba Buena Redevelopment Projects--projects expanded to include link to BART; BART expenditure qualified as local redevelopment credits; marketing was modified to stress BART proximity. 	<ul style="list-style-type: none"> - Market Street Beautification--a \$5 million project including plazas and street and sidewalk amenities and improvements; would probably not have been approved without BART.
2. Oakland-CBD	<ul style="list-style-type: none"> - Revitalize downtown and encourage new development. 	<ul style="list-style-type: none"> - City Center Redevelopment Project--was linked to BART and expanded because of \$2 million in added local matching credits due to BART; but overall, Grove Shaffer Freeway probably more important to success of project than BART. - Peralta Redevelopment Project--encouraged downtown location of Laney College, BART responsible for \$1.7 million in local credits and probably made project possible. - Oak Center and Acorn Projects--BART provided 25% of all local credits for this \$41.5 million project. 	<ul style="list-style-type: none"> - Broadway Beautification Project--initiated because of BART; funded by BART with additional \$1 million through Local Improvement District of Broadway merchants.

(2) In Urban Residential Areas, BART Caused Only Minor Changes In Redevelopment And Public Improvement Policy

In the three urban residential areas studied, redevelopment and public improvement projects tended to be somewhat less affected by BART. Specific impacts are outlined in Exhibit VI.

In the Mission district of San Francisco, proposed redevelopment was rejected and BART-related public improvements have been limited to minor plaza and street improvements. In 1962, the Mission district was a declining commercial and residential community with little reported evidence of public or private reinvestment. Although the proposed redevelopment project related to BART was defeated, a street beautification program was implemented.

In the Rockridge district of Oakland, no public redevelopment projects were proposed, nor have any major public improvement projects been implemented. The Rockridge community was clearly opposed to public redevelopment, and the station's location in the freeway median prevented it from being a catalyst to any local street beautification project. Therefore, few BART-related changes in redevelopment or public improvement policy can be traced. However, the planning effort that resulted largely from BART helped provide the support for smaller public improvement and rehabilitation projects.

In Richmond, BART enabled the City to finance an expanded downtown redevelopment project and several long-desired grade separations. In 1962, Richmond's downtown Redevelopment Project was still in the planning stages (a survey and planning contract was executed in 1962), and most of the downtown was surrounded by frequently used, at grade, railroad lines (the "iron triangle"). In response to BART, Richmond's Downtown Redevelopment Project, which was initially delayed until late 1964 because of indecision about BART alignment, was expanded in 1967 to include the BART station (Nevin Corridor). BART financing became critical to both this project and the state-assisted grade separation projects.

(3) In The Suburban Areas Studied, Few BART-Related Changes In Joint Development Policy Can Be Traced

In both Fremont and Walnut Creek, no BART-related public redevelopment project was proposed, and the only BART-related public improvements other than the station and parking lots were street realignments, widenings and intersection improvements.

EXHIBIT VI
 Public Policy Project
 BART'S IMPACT ON PUBLIC IMPROVEMENT
 AND REDEVELOPMENT POLICY
 URBAN RESIDENTIAL AREAS

<u>Case Study Area</u>	<u>Intended Impact On Land Use</u>	<u>BART's Impact On Redevelopment Policy</u>	<u>BART's Impact On Public Improvement Policy</u>
1. Mission District (San Francisco)	<ul style="list-style-type: none"> Increase amenities along Mission Street to support local retail uses. 	<ul style="list-style-type: none"> Mission Street Redevelopment Project--a \$90 million 271 acre project proposed to capitalize on BART through housing rehabilitation and some new development; eventually opposed by community and rejected. 	<ul style="list-style-type: none"> Mission Street Beautification--used \$500,000 of Market Street Bond Issue funds for sidewalk and plaza improvements at BART stations.
2. Rockridge District (Oakland)	<ul style="list-style-type: none"> Prevent development 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Negative reaction to BART-related development plans helped foster conservation programs.
3. Richmond	<ul style="list-style-type: none"> Revitalize downtown 	<ul style="list-style-type: none"> Downtown Redevelopment Project--expanded to BART; modified to focus on BART-related uses; financed in part through qualification of BART expenditures as local matching funds. 	<ul style="list-style-type: none"> Nevin Mall--pedestrian mall and beautification project linking BART station with downtown. Grade separated railroad crossings--had long been planned but were made feasible by BART alignment and financial support.

V. THE IMPACT OF BART ON LAND USE AND DEVELOPMENT

Chapter IV described BART-related local land use policy changes. This chapter assesses the combined impact of these policy changes on actual changes in land use and development patterns that have already occurred near BART.

Another BART Impact Program project (Land Use And Urban Development) is specifically investigating the relationship of BART itself to land use changes. However, there is a danger of misrepresenting the complete relationship if one does not also consider the impacts of BART-related local policy on land use. Therefore, this Working Paper assesses the relationship between BART-related local policy changes and land use. The LUUD will conduct primary research on the specific BART-related land use and development changes. Many of the findings noted in the following pages are based on secondary sources and may change in light of LUUD results. However, they do represent the best judgment of the study team and are based on a review of documents as well as key informant interviews undertaken for both the Land Use and the Public Policy Projects.

BART's impact on actual land use and development as a result of land use policy changes is difficult to assess. For example:

- BART's relationship to the land use policy changes described has often been indirect; and it is sometimes difficult to substantiate judgment or speculation on how much these policies would have differed without BART. The whole land use policy environment was changing and BART either served as a catalyst or was an essential ingredient of the change.
- The relationship of land use policy to subsequent changes in the land use is often indirect. It is, again, difficult to substantiate judgment or speculation on how much land use would have differed without the BART-related changes. Development is influenced by a myriad of factors including market demand, land availability and cost, and local land use policy.
- BART's relationship to land use policy, and land use policy's relationship to subsequent development, is often a long-term process. BART began revenue service in 1973. It is still not operating at full service, and many development changes may not show up for some time. This is particularly true since a recession began shortly after BART opened.

It is often difficult to hypothesize local land use policy under a No-BART Alternative. (We have assumed that the No-BART Alternative is the one hypothesized by the Metropolitan Transportation Commission.)

With these qualifications in mind, the impact of BART-related local land use policy on actual land use and development is outlined for each of the three types of communities (downtown, urban residential, suburban).

1. BART HAD ITS MOST DRAMATIC IMPACT ON LAND USE IN THE DOWNTOWN AREAS

In the two urban core areas, Oakland and San Francisco, the relationship between land use policy changes and subsequent land use changes would appear to be strong.

This was particularly true in San Francisco, where aggressive planning, zoning, redevelopment and public improvement policies were all combined in an effort to take maximum advantage of BART--to improve Market Street and to facilitate the expansion of downtown across Market Street, while protecting the character of Nob Hill, North Beach and Jackson Square.

The relationship also holds true in Oakland, where local policy implementation was limited to redevelopment--a tool greatly facilitated by local credits from BART. Redevelopment has been largely responsible for a new downtown college campus (Laney College) and a new City Center project bringing the first new construction in years to the heart of what was a rapidly declining commercial area.

(1) In Downtown San Francisco, Significant Land Use Impacts Resulted From Policy Changes Intended To Capitalize On BART

As reported earlier, there appears to be substantiation for what Jacobs & McGill reported as the Zwerling hypothesis, i.e.:

"The impetus for rapid transit seemed to arise not primarily from a concern for better transportation to serve the region, but rather from a desire to rejuvenate the downtown retail business and financial districts of San Francisco."

It also appears that this desire, at least in relation to San Francisco, has been realized due to BART, BART-related land use policy and a number of other factors.

Directly as a result of BART-induced land use policy, the \$35 million Market Street Beautification Project was implemented and the whole character of Market Street is now beginning to change--pedestrian traffic has grown, business has improved and the physical appearance of Market Street itself has improved significantly.

BART and BART-related land use policy changes have directly affected the pattern of financial district expansion in downtown San Francisco. In particular, development patterns have changed, with a very large proportion of the buildings being built to the south of Market Street and to the east of Sansome Street. No major downtown office building was constructed on the south side of Market or to the east of First or Battery between 1950 and 1964. Starting in 1965, there was increasing office construction south of Market. Eleven of the 13 buildings constructed in San Francisco between 1973 and 1975 were in this area. The role of BART and BART-related land use policy in these developments is difficult to measure, but the combined impact can be related to the following factors:

- . Some office buildings south of Market could not have been feasibly constructed without the 1966 changes in the downtown zoning code--changes which were related to BART and which reduced parking requirements south of Market, while at the same time increasing allowable densities.
- . Some office construction has specifically taken advantage of BART-related zoning bonuses (increased floor area for proximity or connection to BART).
- . "BART and related improvements demonstrated to office developers that Market Street and south of Market were safe for long range investment. As BART construction proceeded, so did undergrounding of the City trolley system and the beautification of Market Street. These activities resulted in Market Street becoming a sufficiently respectable location

so that major office developers were no longer embarrassed to have a Market Street address."¹

Zoning restrictions to the north and west of the existing financial district might not have been politically feasible without the prospect of BART and Market Street beautifications. These restrictions are largely responsible for curtailing financial district expansion to the north and west and helping direct it to the south.

BART and BART-related street improvements and changes in zoning may have also indirectly influenced the share of the region's office construction in San Francisco. San Francisco's share of the five county SMSA's office growth increased from its average of 15% in the 1960-62 period to a peak of over 71% in the early 1970's.² Office space in San Francisco increased by approximately 20 million square feet between 1962 and 1977 with a consequent increase in downtown office workers from 125,000 to 200,000. This construction has been valued at \$1.25 billion. While this growth did occur after the passage of BART and the city's adoption of aggressive downtown revitalization policies, it is difficult to determine the role of BART and BART-related land use policy. It is likely, however, that there was some positive relationship.

Construction of BART and BART-related improvements initiated by the City (Market Street Beautification, plazas, etc.) symbolically demonstrated a continued commitment to the downtown at a time when private concern over its future was growing.

"BART, the Golden Gateway and Yerba Buena Center Redevelopment Projects, the Market Street Beautification and other factors all worked together to facilitate the gradual spread of

¹ Jacobs & McGill, An Analysis of BART-Related Joint Development in San Francisco, 1976, p. 60, p. 42.

² Security Pacific Bank, Research Department.

San Francisco's Financial District from its post-earthquake focus at Montgomery and California Streets to and beyond Market Street."³

- "Without BART, office expansion would have continued, perhaps at a lower rate, toward the Embarcadero and along the northern waterfront, north of Market Street."⁴
- "BART may very well have helped make the Golden Gateway Redevelopment project a success because of the addition of the Embarcadero Station to the system."⁵
- Increased areas of office development permitted in the downtown plan and downtown zoning changes have facilitated development. These areas were provided due to expectations of reduced congestion and improved ability to accommodate higher densities due to BART.

(2) The Combined Impact Of All BART-Related Policy Changes In Downtown Oakland Was Less Than In San Francisco

Despite the fact that Oakland is at the center of the BART system, October 1976 patronage at 12th and 19th Streets totalled 21,000 entries and exits, or less than one fourth of the level of activity at the two main stations in downtown San Francisco. Because of this relatively lower patronage and lower visibility of the system, direct effects of BART on downtown development activity have been reported as minimal by investigators and key informants.

However, the presence of BART has been very instrumental in one critical area of local land use which has significantly affected downtown development activity policy--redevelopment. BART expenditures qualified as a significant portion of the local share of project

³ Jacobs and McGill, op. cit., pp. 42, 43.

⁴ Professor Douglass Lee, Market Street Study, Part III, Volume IV, 1973.

⁵ Jacobs and McGill, op. cit., p. 59, and confirmed by interviews with Embarcadero Center managers.

costs. It is doubtful whether the City of Oakland would have been able to replace the approximately \$7,000,000 in local credits due to BART--credits which permitted the significant expansion of some projects (City Center) and the establishment of others (the Peralta Project). These projects, in turn, have been instrumental in helping the City implement previously developed plans and in fostering some resurgence in downtown Oakland. Causal relationships that can be traced are described below.

Directly as a result of BART, a Broadway Beautification Project was implemented; but a low budget (\$1 million as opposed to \$35 million in San Francisco) has prevented this project from having a very significant impact on the character of Broadway as a pedestrian and shopping street. The method of financing (a special assessment district) and lack of strong City commitment to the project also prevented it from having broader impact.

BART and BART-related land use policy (primarily the expanded City Center Project) have reportedly begun to affect the pattern of office/commercial district growth in downtown Oakland.

- . Near the 12th Street station, where the City Plan has attempted to prevent shifts of development further up Broadway, primary development activity has focused on the expanded City Center project whose financing was heavily dependent on BART. The Wells Fargo Bank Building and the Clorox Building have been completed (700,000 square feet of offices) and an additional 1.3 million square feet are still to be built. Pedestrian activity near the 12th Street station has also increased from a count of 7,000 in 1970 to 10,600 in 1976, at the same time that vehicle counts were decreasing. Office/commercial renovations have also taken place (notably Capwells) in concert with limited street beautification activities.
- . Additional development has also continued near the 19th Street station which has been the healthier end of the Broadway spine since the early

1960's. This development has occurred without the assistance of BART-related zoning or redevelopment policy. It included a Golden West Savings and Loan Building (with a BART connection), the Bank of Tokyo Building, a Blue Cross Building and a Pacific Telephone Building.

The City has successfully expanded its efforts to consolidate public buildings near the Lake Merritt station in a "regional government center around the existing County and State office buildings."⁶ BART-related redevelopment financing in addition to BART-related city lobbying was directly responsible for convincing the Peralta College District to locate its large Laney College campus near the station.⁷ In addition, BART-related land use policy was directly responsible for the construction of BART headquarters in this area. BART also may have helped encourage the location of the Oakland Art Museum in the same area.

Although Oakland already had a pro-development land use policy before BART (few restrictions on office/commercial or apartment development), BART-related changes in redevelopment policy may have been partially responsible for the first significant new downtown construction boom (except for the Kaiser Center) since the 1940's. This expanded redevelopment policy has been greatly assisted by local credits generated by BART. Redevelopment not only provided lower cost assembled land with public improvements, it also "symbolically demonstrated a continued commitment to the central city."⁸

⁶ Gruen Associates, Indirect Environmental Impacts--Document No. DOT-BIP-TM, 24-4-77, (Berkeley: Metropolitan Transportation Commission, July 1977).

⁷ Based on key informants who noted that the cost and availability of land through redevelopment was the key factor in convincing the district to locate its campus at the BART station site as opposed to a site in the hills.

⁸ Jacobs and McGill, op. cit.

2. BART CAUSED SIGNIFICANTLY DIFFERENT LAND USE IMPACTS IN THE DIFFERENT URBAN RESIDENTIAL AREAS STUDIED

In two of the urban residential areas studied, Rockridge and Mission, early efforts to encourage BART-related land use changes have been reversed as the result of strong community opposition and support for preservation policies. Some development has reportedly been prevented and the actual land use changes have been minimal.

In the other urban residential area studied, Richmond, the most effective local policy tool was redevelopment and public improvement policy. As in Oakland, these policies were modified by the incorporation of BART and facilitated by the use of BART financing for credits. These policies have been largely responsible for the first major office construction in the Richmond CBD since 1940 and the construction, in particular, of a \$30 million Social Security Payments Center employing 2,000 people formerly employed in San Francisco and elsewhere in the region.

(1) In The Mission District Of San Francisco, Projected Land Use Impacts Have Not Occurred, In Part Because Of Organized Community Opposition

BART impacts on land use and development in the Mission have been far less than those projected in early studies.⁹ These studies concluded that development activity in the Mission area would increase significantly. The greatest increase was expected around stations, where there would be a "clustering of new and existing activities, with a corresponding decline in activities between stations."¹⁰

Although this type of development activity has not yet occurred, it may still be too early to tell if these projections will come true. Early local land use policy changes to encourage projected development while mitigating its effects and easing the transition have now been replaced by more restrictive and preservation-oriented land use policy. This change in policy may be partially responsible for preventing previously projected changes in land use. However, the development pressure also may not have increased to the extent

⁹ Okamoto/Liskamm, Mission District Urban Design Study, San Francisco Planning Department, 1966; Development Research Associates, Economic Analysis, Rapid Transit Corridor Study, GNAP, 1966.

¹⁰ BART Office of Planning, Development Around BART Stations (revised May, 1973).

originally anticipated, based on transit experience elsewhere (Toronto, Cleveland). Causal relationships that may be traced are described below.

Directly as a result of BART, a Mission Street Beautification Project was implemented. But, as in the case of Oakland, a low budget (\$500,000) has prevented this project from having a very significant impact on the character of Mission Street as a pedestrian and shopping street.

Largely as a result of projected BART impacts and BART-related land use policy (proposed redevelopment and increased building heights near BART), the neighborhood organized to push for downzoning and conservation and rehabilitation efforts along the Mission Street commercial district. According to several key informants, apartment and office development that would have occurred near BART under previous land use policy has been deferred or precluded. Reported examples of this were:

- The proposed expansion of Bay View Federal Savings and Loan (an existing office building at 22nd and Mission) was withdrawn after community opposition. This savings and loan (the largest building on Mission Street) has now moved its headquarters from the Mission district to the peninsula--reportedly because of perceived anti-development and anti-business attitudes in the Mission.
- A proposed new Pan American Savings and Loan building at 23rd and Mission was also withdrawn as a result of financing and community opposition problems.
- Several apartment developments have been modified or made unfeasible as the result of restrictive zoning.

It is also likely that development pressure has not yet increased to the level anticipated. The lack of demand, combined with the lack of aggressive land use policy to encourage development, may be more responsible for the lack of BART-related development along Mission Street than restrictive policy. Mission Street is still zoned commercially. Height limits at the BART

corner sites are still 105 feet and, although lower than originally proposed, they still would permit considerable development if the market existed.

Partially as a result of BART-related land use policy (proposed redevelopment, general plan density increases and rezonings), the Mission neighborhood has also organized to push for expanded conservation and rehabilitation efforts throughout the residential districts of the Mission. Substantial reductions in allowable residential densities have resulted (single family and duplex areas were previously planned for medium density, three to nine unit buildings), and it is now doubtful whether projected BART-related increases in residential densities will occur. Instead, there will probably be continued neighborhood conservation and rehabilitation activities with limited infill construction such as has begun to occur in recent years.

A major BART-related impact on the Mission may also occur in the form of increased housing demand, housing costs, and a change in the population composition. Although remotely linked to BART, substantial increases in downtown development and office worker populations may have been facilitated by BART and BART-related land use policy. These developments, combined with conservation and improvement policies geared to preserving the scale and character of the Mission, may together increase housing demand in the Mission. The extent to which this causal chain is BART-related, however, is limited and indirect.

(2) In The Rockridge District Of Oakland, Significant BART-Related Land Use Impacts Have So Far Been Prevented, In Part By BART-Related Land Use Policy

As in the case of the Mission District, BART impacts on land use in Rockridge have been far less than those projected in early studies.¹¹ Although projected increases in residential/commercial development densities have not occurred near the station or in the surrounding area, it may still be too early to tell if these projections will come true. However, it is clear that preservation-oriented policies adopted in response to projected BART impacts (downzoning) have prevented some privately initiated development in the area.

¹¹ Oakland City Planning and Gruen & Gruen, Alternatives for Rockridge, 1974.

(3) In Richmond, Land Use Changes In The Still Uncompleted Public Redevelopment Project Have Been Significant

BART's impacts on land use and development in Richmond have also been far less than projected in early studies which foresaw substantial demand for residential as well as office commercial development near the BART station. However, significant impacts have occurred--particularly as a result of BART-related development and public improvement policy.

Largely as a result of BART, Richmond was able to construct a \$5 million Nevin pedestrian mall to connect downtown with Civic Center along the Nevin Avenue right-of-way. This development could not have occurred without BART-related financial assistance and the BART-induced extension of the Redevelopment Project.

Also, largely as a result of BART, Richmond was able to construct additional grade separations under an existing railroad to provide a better connection between the "iron triangle" (the commercial area surrounded by railroad tracks with at-grade crossings) and the other residential areas of the city. Increased priority for State assistance due to BART, as well as direct BART assistance serving as the substantial local share, made these improvements possible.

The major visible land use impact of BART in Richmond is the new Social Security Payments Center. This \$30 million development occurred within a redevelopment project, was financially assisted by BART local credits and was the direct result of intensive political lobbying using BART and the immediate availability of land near BART as a major selling point. This Payments Center, employing 2,000 people formerly employed in San Francisco, would clearly not have been located in Richmond were it not for this marketing effort and supportive land use policy (Richmond was not on the original list of potential sites). The importance of this development is noted in the environmental impact statement for the project.¹²

"The siting of the center within the Richmond Downtown Urban Renewal Area will serve as a catalyst to the realization of the

¹²Final Environmental Impact Statement, Social Security Administration Payments Center, San Francisco Bay Area, California, June, 1973.

long-term Richmond development plans which include extensive economic and population growth for downtown Richmond."

Downtown Richmond redevelopment, although planned prior to the BART bond issue, has been modified to take more advantage of BART. Originally very slow to develop as a planned regional shopping center, development is now proceeding with land uses that are likely to be more residential and institutional than originally planned. BART and BART-related public improvements (e.g., the grade separations) provided substantial financial assistance for this project in the form of approximately \$2 million or 30% of the required local credits. Completed or committed developments include a Kaiser medical care facility, a housing project for the elderly, and several other smaller office buildings in addition to the Social Security Payments Center. These office buildings represent the first built in downtown Richmond in 40 years.¹³

A proposed transportation center, recently implemented in part with the construction of an AMTRAK station adjacent to BART, is the direct result of City lobbying efforts using the BART station as leverage.

3. BART HAS HAD ONLY A SMALL IMPACT ON LAND USE AND DEVELOPMENT IN SUBURBAN COMMUNITIES

In the two suburban areas studied, Walnut Creek and Fremont, early efforts to encourage development near BART have not yet had substantial impacts. However, implementation has thus far been limited to planning and zoning policy. Specific zoning changes were partially responsible for the construction of one 10 story office building at the Walnut Creek station and the development of a small regional shopping center at the Fremont station.

- (1) In Suburban Walnut Creek, The Repeal Of Originally Effective BART-Related Zoning Incentives Has Prevented Additional Impacts Beyond One High-rise Office Building

BART's impact on land use and development in Walnut Creek has been less than had originally been anticipated; but it may still be too early to tell what the net result will be. There have been few land use

¹³ Bay Area Rapid Transit District, Office of Planning, Development Around BART Stations (Revised May, 1973).

policy changes carried beyond the "general plan" stage, but the following land use impacts can be partially traced to BART-related land use policy.

Early BART-related zoning incentives (primarily parking) helped encourage a 10-story (Dillingham) office building adjacent to the BART station (one of two high rises in Walnut Creek). Repeal of the parking incentives (largely in response to this first high rise building) and a slackening of office demand have reportedly made construction of the second twin tower near BART unfeasible.

The recently adopted 1976 Core Area Plan, if implemented, would eventually provide for 2.5 million square feet of office/retail space, and the 1,035 new apartments and high rise development near BART.¹⁴ The plan proposes this change, in part, through the replacement of older single family uses north and south of the BART station with office/retail/high density residential uses (30 dwelling units per acre). The key phrase, however, is "if implemented." While other urban core and urban residential areas have pursued plan implementation through public improvements, redevelopment and zoning, Walnut Creek has not yet pursued these types of land use policies near BART. Without such policy changes, it does not appear likely that "planned" land uses will occur in the near future.

(2) In Suburban Fremont, The CBD Has Expanded To The BART Station Area, But There Have Been Few Additional BART-Related Land Use Changes

As in Walnut Creek, BART-related land use policy changes have been restricted primarily to planning and zoning. The only land use change that can be partially attributed to BART-related land use policy is the development of the Fremont Fashion Center and the Alameda County Courthouse. The commercial development (a small regional shopping center) occurred in an area which was rezoned for CBD development when the CBD was extended to the BART station in a 1969 Plan Amendment. The County Courthouse location was partially influenced by City lobbying using BART.

The recently adopted 1974 Plan Amendment, if implemented, would provide for substantially increased residential densities within one quarter mile of the BART

¹⁴Gruen Associates, Indirect Environmental Impacts--Document No. DOT-BIP-TM 24-4-77, (Berkeley: Metropolitan Transportation Commission, July 1977).

station (planned densities are quadrupled to 50 to 70 dwelling units per acre). In contrast to Walnut Creek, the area involved in Fremont is primarily undeveloped. However, the key phrase is again "if implemented." Many of the planned higher density areas have recently developed with lower density and single family uses and, without further implementation, remaining areas may also develop at relatively low densities. However, a recently approved 712 unit residential development called "The Hub" (within walking distance from BART) had lower parking requirements than would have been required without BART access.

VI. CONCLUSIONS AND IMPLICATIONS

The findings described in this report provide the basis for five major conclusions:

- Local community involvement in BART station location and design decisions was usually been characterized as too little, too late.
- Early projections of BART impacts on land use may have been overestimated and inadequately related to the necessary role of supportive local land use policy.
- BART had significant impacts on land use policy in every jurisdiction studied--particularly on planning studies and subsequent public improvement or redevelopment policy.
- BART-related local land use policy has had a significant impact on the nature and extent of BART-related land use changes. This is particularly true of redevelopment and public improvement policy.
- Land use and development expectations of BART have been met only in the San Francisco CBD--in part due to the lack of adequately supportive land use policy in other areas.

1. LOCAL COMMUNITY INVOLVEMENT IN BART STATION LOCATION AND DESIGN DECISIONS HAS USUALLY BEEN CHARACTERIZED AS TOO LITTLE, TOO LATE

After 1962, decisions on station location and design modifications were primarily dependent on engineering and cost considerations. When communities wanted changes, their efforts often came too late.

(1) Only In The Smaller Jurisdictions Did Local Government Have An Effective Role In Modifying Station Location Decisions After 1962

In the larger jurisdictions with multiple stations (Oakland, Berkeley and San Francisco), coordination among city departments, elected officials and the community was reportedly so poor that local involvement

was ineffective. This was, in part, responsible for San Francisco's having to build an additional Market Street station at local expense and for Berkeley's having to pass a local bond issue to underground BART. All of these problems were somewhat related to local land use objectives.

In the smaller jurisdictions (Richmond, Fremont and Walnut Creek), only one station was involved and coordination was easier to effect. The result was reasonable local government satisfaction with post 1962 modifications to BART alignment and station locations in all three jurisdictions.

(2) Problems With Detailed Station Design Decisions Frequently Arose Due To Local Government And Community Involvement Coming Too Late In The Process

Station design decisions were an issue in all the jurisdictions studied. In Oakland, San Francisco and Richmond, these decisions were closely related to land use objectives. In all three of these cities, design decisions were reportedly unable to be modified to help meet local land use objectives. In Oakland, the 19th Street plaza development was opposed by BART due to prohibitive costs. The same was true for the extended open air mezzanines proposed in San Francisco and the overhead mall development proposed in Richmond. In all, local government involvement was reportedly too late and too fragmented to be judged effective. It remains unclear whether this was due to lack of BART cooperation or inadequate local government attention to the issues.

2. EARLY PROJECTIONS OF BART LAND USE IMPACTS MAY HAVE BEEN OVERESTIMATED AND INADEQUATELY RELATED TO THE NECESSARY ROLE OF SUPPORTIVE LOCAL LAND USE POLICY

Described below are conclusions about the problems associated with overestimates of BART impacts on land use.

(1) There Was A Natural Inclination To Oversell The BART System And Overestimate BART Impacts On Potential Demand And Development

In order to get early political support from key decision-makers, there were reportedly conscious efforts by BART representatives and others to emphasize the significant and beneficial impacts BART would have on

development. Although projections may have been accurate given the assumptions (the LUUD will be investigating this) or the precedents cited (Toronto, Cleveland), there is also evidence that projections may have been overstated or assumptions inappropriate (e.g., Toronto did not have an extensive freeway system). In some cases, overzealous projections may have become counter-productive as land speculation escalated and community fears increased.

(2) Projections Were Usually Made By Real Estate Or Economic Consultants To Local Government And Were Not Usually Related To Alternative Policy Strategies

There may also have been a tendency in the 1960's to underestimate the role of public policy, community involvement and development strategy in the whole process of urban development. Therefore, with no qualifications regarding projected BART impacts on land use, some local governments may not have realized that these projections would not automatically come to pass without aggressive local support.

3. BART HAD SIGNIFICANT IMPACTS ON LAND USE POLICY IN EVERY JURISDICTION STUDIED--PARTICULARLY STUDIES AND SUBSEQUENT PUBLIC IMPROVEMENT OR REDEVELOPMENT POLICY

Described below are conclusions about the ways in which BART has affected local land use policy. Conclusions about three types of planning and zoning policy changes are drawn (planning studies, rezonings, special development controls or incentives) and conclusions about three types of joint development policy are drawn (public redevelopment, public improvements and joint development marketing).

(1) High Expectations Of BART's Impact On Land Use Resulted In Planning Studies And Plan Changes In Every Jurisdiction Studied

In some cases, special station area studies were conducted because of BART (at the Fremont, Walnut Creek, five outlying Oakland stations and a number of the non-case-study stations). Except in Fremont (where the station area was undeveloped), these station area studies were quite controversial and their recommendations for encouraging appropriate development near BART were usually not adopted. They did, however, serve to arouse citizen interest in community land use issues near BART.

In Fremont, a General Plan amendment was adopted, quadrupling allowable densities within one quarter of a mile of the station. In addition, many of these station area studies (particularly Walnut Creek and Rockridge) led to increased demands for comprehensive area plans which were subsequently prepared and adopted.

In other cases, Rapid Transit Corridor Studies were conducted in direct response to BART (in the Oakland and San Francisco CBD's, in the Mission district, in Richmond and in Berkeley). These studies were generally conducted in jurisdictions having more than one station. They generally included economic analyses which projected significant increases in demand for offices and housing near BART. Although none was adopted as part of the General Plan, they were usually conducted in large part by the Redevelopment Agency and therefore became the basis for significant Redevelopment Project Plans or Plan Modifications. Some were adopted and led to funded projects (Oakland CBD), others led to modified projects (Richmond and San Francisco CBD's) and others were never adopted (San Francisco Mission district).

In addition to BART-induced planning studies, general planning activities were also affected by BART and local General Plans were modified in a number of significant ways. The impact was the most evident in San Francisco, where the adopted downtown plan was modified to call for increased densities near BART, and where BART was proposed as a tool to help the CBD bridge the existing transit spine (Market Street). In addition, San Francisco's housing element called for increased residential densities near BART stations, and the urban design element called for increased heights and development near BART stations. In other areas studied, the impacts were similar, although BART's role was not as emphasized. Increased densities and heights near BART were recommended in the adopted plan for every jurisdiction studied.

(2) BART-Related Planning Studies Resulted In "Upzoning" Or "Downzoning" In Many Station Areas

A second type of planning and zoning policy affected by BART was the rezoning of areas near BART stations. Only in the San Francisco CBD was BART related to significant increases in allowable densities (near BART and Market Street). In San Francisco, this policy was made more effective by decreases in allowable densities elsewhere (particularly in established residential/commercial areas near the financial district). Increased

densities were also approved near the two suburban stations studied. But, in the Mission and Rockridge districts, "downzonings" resulted from community concern about projected BART impacts of increased higher density development.

(3) Special Incentives And Special Development Review Procedures Were Adopted For Areas Near BART Stations

A third type of planning and zoning policy related to BART was the adoption of special development incentives or controls. In some cities, special zoning incentives were provided for development near BART. Height and parking incentives were adopted in Walnut Creek (where they have now been repealed) and in Oakland and in San Francisco. But only in San Francisco were there significant bonuses for development with a direct connection to BART or with proximity to a BART station.

Some cities also adopted or are considering special development review procedures near BART stations. In Rockridge, a community planning organization reviews all development proposals near BART and its advisory recommendations have so far been followed by the Planning Commission. In San Francisco, special discretionary review guidelines have been established for the full length of Market Street (more related to the Beautification Project). In the Mission and Walnut Creek areas, these special review procedures are being considered.

(4) Redevelopment Policy Has Been Significantly Affected By BART In The Three Cities With Active Redevelopment Agencies

One of the most important land use policy impacts of BART was on public redevelopment projects--their design, financing and marketing. Particularly in Oakland and Richmond, but also in San Francisco, redevelopment projects were modified to take greater advantage of BART. Projects were extended to link to BART stations, and their financial feasibility was enhanced by the substantial share of "local credits" sometimes provided by BART. Projected land uses were sometimes influenced by BART and redevelopment marketing was assisted by BART (both in terms of improved accessibility and environment).

(5) BART Has Significantly Affected Public Improvement Policy In Some Case Study Areas, But Not In Others

Major beautification projects and plaza developments were implemented in response to BART. BART provided direct financial assistance as well as critical indirect support by helping jurisdictions come up with necessary matching "local shares" for Federal or State grants. Projects included a \$35 million Market Street Development Project in San Francisco; a total of \$3 million worth of street beautification programs in Oakland, Richmond and the Mission district; and \$4 million of grade separated crossings in Richmond and Fremont. Miscellaneous street improvements also resulted from BART.

(6) The Impact Of BART On Joint Development Marketing Efforts Has Been The Greatest With Respect To Federal Agencies

BART has helped attract Federal offices due to the requirements of the General Services Administration for sites with public transit proximity. Examples include the Social Security Payments Center at the Richmond station and the Energy Research and Development Agency at the Oakland 12th Street station. BART has also played an important role in marketing development for other public jurisdictions and institutions. Examples include Kaiser Medical Clinic at the Richmond station and county buildings at the Richmond, Fremont and Oakland stations. In the case of private corporations, BART has played less of a role in local government marketing activities.

4. BART-RELATED LOCAL LAND USE POLICY HAS HAD A SIGNIFICANT IMPACT ON THE NATURE AND EXTENT OF BART-RELATED LAND USE CHANGES

As noted in previous studies:

"Patterns of land use change around BART stations clearly indicate that the presence of a rapid transit station does not automatically lead to immediate development changes in the surrounding area." Instead "development potential is the result of the interaction of the right regulatory, economic, market and political factors in the right place at the right time."¹

¹Gruen Associates, Indirect Environmental Impacts--Document No. DOT-BIP-TM 24-4-77, (Berkeley: Metropolitan Transportation Commission, July 1977).

The conclusion of this study supports the hypothesis that local land use policy plays a complicated but important role in determining the land use impact of a transit system.

(1) Changes In Local Zoning Related To BART Have Both Encouraged And Discouraged Changes In Development Near BART

The impact of BART-related zoning changes depends largely on the extent of demand and the degree to which controls are matched with incentives.

Only in the case of the San Francisco CBD were incentives and restrictions balanced in an environment of substantial office/commercial demand. The effects of zoning changes have been significant. The spread of San Francisco's financial district into established residential/commercial neighborhoods has been prevented while a large portion of the City's \$1.25 billion of office expansion since 1962 has, instead, been directed into formerly less desirable areas south of Market and eastward along Market Street. While other factors have been important in influencing this development (particularly the BART-related Market Street Beautification Project), zoning has played a critical role. Specific incentives for BART connections and BART proximity have been used in some cases. In addition, much of the office development could not have occurred without the reduced parking requirements and increased floor area ratios which have been adopted along and to the south of the Market Street transit spine.

Where market demand was not present, or where incentives were not combined with restrictions, effects on land use and development have not been significant. In Walnut Creek (where market demand for offices has not yet met projections), a ten-story office building was built in 1972 with the benefit of zoning incentives adjacent to BART, but little has happened since. In Oakland (where the market was weakened by existing surpluses of office space and where incentives near BART were not combined with restrictions elsewhere), zoning has had little, if any, effect on downtown development. In Richmond, early attempts to encourage office/commercial and residential development near BART were completely undermined by parallel efforts to encourage the same type of development in a vacant area near the freeway and away from the CBD (the Hilltop Regional Center).

In areas where moderate market demand developed, but where substantial community opposition existed, early efforts to encourage development through zoning were reversed. The more restrictive controls adopted have so far succeeded in preserving the existing neighborhood scale. They may also have prevented or redirected limited BART-related development that otherwise would have occurred. This was particularly true in the Mission and Rockridge case studies and it was also reportedly true in Berkeley.

Where market demand has not yet developed, zoning changes to facilitate high-density development have had little impact as yet. In Richmond, no market has developed and no significant zoning changes have been adopted since 1962. In several other suburban jurisdictions, zoning changes have been adopted, but there has been little interest in developing to the full allowable densities near BART (for example, high density residential zoned areas near BART in Fremont have been developing at lower density).

(2) Changes In Redevelopment And Public Improvement Policy Have Proven To Be A Critical Element In The Encouragement Of Land Use Changes Near BART

Joint development policy has had a significant impact on land use even when the market demand was strong, but it has also affected land uses in areas where the market was weak.

In San Francisco, where BART-related joint development policy was accompanied by strong market demand, major impacts on land use can be traced. The \$35 million Market Street Beautification Project, its large scale made possible by BART, is continuing to have impacts on land use. It has reportedly been responsible for expediting the growth of the financial district to the south side of Market Street and eastward to the Embarcadero. In addition, the expanded and BART-modified redevelopment projects (Embarcadero and Yerba Buena Center) plus the tax-increment financed Embarcadero BART station, have provided significant inducements to development near the two BART stations affected (Powell Street and Embarcadero).

In Oakland and Richmond, BART-related joint development policy was not accompanied by strong market demand, yet effects were substantial. For example, in Oakland, BART local credits provided critical financial support for expanded redevelopment projects (which

has now been responsible for the location of a major college campus downtown and near BART). In Richmond, BART "local credits" provided critical financial support for grade separated railroad crossings (which broke the "iron triangle" of tracks surrounding downtown) and for the downtown redevelopment project (which, with aggressive joint development marketing, has now been responsible for the \$30 million Social Security Payment Center as well as other office and residential construction). In both Richmond and Oakland, CBD investments have restored some private confidence in downtown, but plaza and beautification improvements were too minor to have significant impact on surrounding land uses. In other jurisdictions studied, joint development policy was restricted primarily to street improvements and parking facilities. These improvements have affected immediate land use but had little effect on surrounding uses.

5. LAND USE AND DEVELOPMENT EXPECTATIONS OF BART HAVE BEEN MET ONLY IN THE SAN FRANCISCO CBD--IN PART DUE TO THE LACK OF ADEQUATELY SUPPORTIVE LOCAL LAND USE POLICY IN OTHER AREAS

Although it is probably too early to determine the eventual impact of BART on land use, several conclusions about why expectations have been met or not met can be drawn as a result of this study.

(1) Where Aggressive And Supportive BART-Related Land Use Policies Were Followed, Expectations Of BART Impacts On Land Use Were Met

In San Francisco, much of the City and corporate impetus for BART was reportedly to revitalize the CBD and facilitate the expansion of the financial district. Therefore, aggressive and supportive planning, zoning map changes, height and floor area bonuses near BART stations, public improvement, redevelopment and marketing were all instituted in a coordinated effort to revitalize the CBD. The market demand was there, so the net result was a substantial expansion of the financial district along and across Market Street.

(2) In Other Areas Supportive Local Land Use Policy May Have Been Inadequate, Projected Demand Has Not Yet Reached Expectations And The Projected Impacts Have Not Occurred

In cases such as Walnut Creek, Richmond and the Oakland CBD, projections of BART-related development were likely overstated initially, but local land use policy has not been sufficiently supportive to really make projected development happen. Richmond approved major new development and a virtual new city center near the freeway interchange; Oakland was less able to restrict development away from the BART stations and Walnut Creek was wary of high density development and unwilling to retain strong incentives for such development near BART.

(3) In Other Areas Local Land Use Policy Has Been Either Nonsupportive Or Resistive To Changes In Land Use, Demand Has Not Developed And Land Use Impacts Have Not Occurred

In cases such as the Mission and Rockridge districts, projections were possibly overstated, but community-initiated restrictive land use policy has also precluded these projections from being realized.

In cases such as Fremont, the importance of BART may be so minimal that supportive land use policy will not have any significant effect, but it may still be too early to tell.

6. FOR MASS TRANSIT INVESTMENTS TO HAVE SIGNIFICANT IMPACTS ON LAND USE, THEY MUST BE AGGRESSIVELY SUPPORTED BY COORDINATED LOCAL LAND USE POLICY--A TASK WHICH MAY REQUIRE OUTSIDE ENCOURAGEMENT

We have previously described our findings and conclusions pertaining to BART-related local land use policy in the Bay Area between 1962 and 1976. These suggest several implications for both the Bay Area and other jurisdictions considering major mass transit investments.

(1) If Local Governments Want To Use Mass Transit Investments To Influence Land Use, They Must Be Prepared To Aggressively Support These Investments With Local Policy Actions

While mass transit investments do affect accessibility and travel behavior, thereby changing the pattern of potential demand and development opportunity, they do not necessarily "cause" development. Particularly in already developed areas with established freeway systems, mass transit effects alone are liable to be disjointed and incremental. Where suburban development patterns are established, where urban residential areas feel threatened, and where downtowns are in transition, mass transit investments represent opportunities, not results. Local policy-makers must decide whether and how to take advantage of these opportunities and how to use the land use policy tools available. Without aggressive use of local land use policy, experience in the Bay Area suggests that land use impacts may be minimal or a very long time in coming. While market demand is a necessary condition, it is not always sufficient and it must be supported by the following types of conditions:

- Land use regulations supportive of local BART-related land use objectives.
- Available land which can be assembled at affordable prices.
- A supportive physical environment particularly in terms of public improvements.
- A supportive psychological environment in terms of long term public/private commitments to environmental quality and economic well being.

(2) Where Public Decisions Are Made To Prevent Land Use Impacts And Preserve Existing Development Patterns, A Combination Of Restrictive Zoning And Neighborhood Conservation Strategies Will Probably Be Effective

Experience in the Bay Area suggests that down-zoning will usually be sufficient to prevent intensive land use impacts near BART stations--at least in the short run. Where some development is desired, it may be useful to establish special design review procedures

and incentives to help direct this development. However, care must be taken or these procedures will discourage all development, as has happened at some Bay Area stations to date.

Upgrading of existing land uses is not likely to occur as the result of mass transit investments and downzoning alone and more supportive neighborhood conservation and public improvement policies will probably be needed to accomplish this objective.

(3) Where Public Decisions Are Made To Capitalize On Development Opportunities, It Will Usually Be Necessary To Pursue A Broad Range Of Coordinated Local Land Use Policies

Experience in the Bay Area suggests that local governments must carefully target those station areas that are both appropriate and have potential for land use changes. Depending on the extent of demand, these areas must be then quickly addressed with some combination of the following types of local policy actions:

- . Planning studies (to effect community involvement and consensus).
- . Rezonings.
- . Special zoning incentives and controls (to encourage compatible development related to mass transit stations and the surrounding community).
- . Public improvements (particularly plazas and street beautification to provide visible evidence of public commitment).
- . Redevelopment incentives (particularly for assembling land).
- . Marketing activities (particularly directed at other governmental entities and institutions).

Experience in the Bay Area also suggests that local jurisdictions and communities must be brought in earlier in the planning process so that station locations and alignment can best serve land use objectives and so that communities and jurisdictions can take maximum advantage of rapid transit while minimizing potential

negative effects. Where numerous jurisdictions and a regional transit system are involved, coordination will probably also present a problem.

(4) Encouraging Aggressive And Supportive Local Land Use Policy Is Likely To Be A Difficult Task--Requiring Continued Attention From All Involved

Public policy tends to be more responsive to crisis than to opportunity. Since the land use impacts of mass transit investments are more likely to represent an opportunity than a crisis, encouraging appropriate public policy actions will often be a difficult task. For policy decisions to be made at an appropriate time, specific incentives and requirements will probably be necessary. Some of these requirements and incentives existed in the 1960's (matching grants, planning funds, etc.) but some have been eliminated and more are needed. Otherwise, public policy responses are likely to be inappropriate, opportunities will be missed, and local land use objectives may not be met. Some specific implications for public policy actions are described below.

- Realistic land use and development projections are needed to determine areas where there is demand potential and where there are opportunities for desirable changes. However, these projections must be made in the context of alternative public policy strategies. Otherwise, expectations may be unrealistically raised or lowered, and policy-makers will be unaware of their role in affecting land use and development patterns.
- Broad-based planning studies are important as a vehicle for developing consensus for an action program and involving important elements of the residential and business community. Experience in the Bay Area suggests that without outside support, such as that which has been provided under HUD grants during the BART period, these studies may not get done. Elected officials, and even planning commissioners, often have a short-term time horizon for decisions. Therefore, outside requirements or

funding for these studies must be assured or it is likely that they will suffer the frequent fate of being too little, too late. These planning studies are also increasingly necessary in states such as California where consistency of plans and zoning is required.

Responsive rezonings are often required to preserve surrounding neighborhoods, to encourage appropriate development near mass transit, and to discourage competing development away from mass transit. In many jurisdictions, such an aggressive use of zoning may be seen as a difficult task, particularly where officials are accustomed to zoning as a tool whose only purpose is to prevent land use conflicts while facilitating perceived development demands. Experience in the Bay Area suggests that if local governments are not willing to use zoning aggressively, land use opportunities may be much more difficult to realize.

Effective systems of special development incentives and controls are often required to encourage specific relationships to mass transit. Reduced parking requirements, maximum parking allowances, density and floor area bonuses and height bonuses may work well as incentives. However, experience in the Bay Area suggests that these incentives must be carefully drawn to reflect development economics as well as public desires. Incentives must also be balanced with special development controls in some cases. This can be a tricky business unless one thoroughly understands the development process.

Cost-effective public improvements are clearly an essential tool for encouraging mass transit related land use changes. They are needed to change the nature of the public spaces (streets, sidewalks, plazas), but

they are also needed to demonstrate public commitment and encourage private investment in both rehabilitation and new construction. However, governments are operating under increasing fiscal constraints and without outside assistance or matching funds, transit related public improvements may be inadequate. Experience in the Bay Area suggests that this was true even in the later 1960's when there was no perceived "fiscal crisis." It is clearly more apparent in the 1970's and the situation may be further aggravated by the reduction in Federal and state "matching grant" types of public improvement and beautification programs. Tax increment financing and special assessment districts should be matched by substantial up front investments from local, state and Federal governments if adequate improvements and incentives are to result.

Redevelopment and land acquisition is obviously one of the most important land use policy tools in the area of joint development. This is due to the frequent need for land assemblage assistance in already developed areas and for adequate mitigating measures (relocation assistance, etc.). However, experience in the Bay Area suggests that the use of redevelopment near BART was greatly assisted by the use of "local credits" from mass transit investments. These local credits are no longer an aspect of redevelopment funding. The transition to community development block grants has meant that available redevelopment resources tend to be divided up among communities and spent incrementally on smaller, more immediate, projects. If redevelopment is to be a useful joint development policy tool for mass transit, an alternative funding source will probably be necessary. Tax increment financing or value capture may

have some potential, but substantial matching public funds will probably be essential, and advance acquisition or land banking may also be necessary.

- Joint development marketing has also proven to be an important tool related to development near mass transit. However, its effectiveness has been limited in part to the good faith cooperation of other public entities or institutions. Experience in the Bay Area suggests that more incentives will probably be needed (similar to the Federal GSA site selection criteria) if joint development marketing is to become more useful.

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APPENDIX B

KEY INFORMANT LIST

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Mr. David Collins, Assistant Director, Yerba Buena Center
Redevelopment

Mr. William Daver, Executive Vice President, San Francisco
Chamber of Commerce

Ms. Sharon DeZordo, Market Street Development Project

Mr. Martin Del Campo, Architect

Mr. Steve Dietrich, Associate, Tosley & Co.

Mr. H.W. Ehlers, President, Milton Meyes & Co.

Ms. Linda L. Ferbert, San Francisco City Planning Dept.

Mr. Walt Gaby, San Francisco Redevelopment Agency

Mr. Elwood Hansen, Chairman of the Board, Bayview Federal
Savings & Loan

Mr. Rich Harcourt, San Francisco Chamber of Commerce

Mr. Allan Jacobs, Former City Planning Director

Mr. John Jacobs, San Francisco Planning & Urban Renewal Association

Mr. Red Kernan, San Francisco Redevelopment Agency

Mr. Ed Lawson, San Francisco Chamber of Commerce

Mr. Bill Mason, San Francisco Redevelopment Agency

Mr. Calvin Malone, San Francisco City Planning Department

Mr. James McCarthy, Former City Planning Director

Mr. Mike McGill, San Francisco Planning & Urban Renewal Association

Mr. Rich Mauer, Federal Reserve Bank

Mr. Gregory Oliver, Economist, San Francisco Mayor's Office of Community Development

Mr. Rai Y-Okamoto, Director, San Francisco City Planning Department

Mr. Ben Ramus, President, Mission Economic Development Association

Ms. Gloria Ramos, Architect

Mr. Mackey C. Salazar, Attorney

Mr. Frank Shaw, Crocker National Bank

Mr. Leonard P. Soto, Executive Director, OBECA, Arriba Juntos

Mr. Peter Svirsky, San Francisco Planning Department

Oakland and Rockridge

Mr. Robert Anderson, Citizens Savings and Loan

Mr. Burton Bangsberg, Assistant Director, Oakland Office Of Community Development

Mr. Ted Burton, President, Rockridge Community Planning Council

Mr. Peter Crosby, V.P., United California Bank

Mr. Frank Erhardt, Senior Planner, Oakland City Planning Department

Mrs. Ruth Giovenetti, Realtor, Rockridge Realty

Mr. Oscar Perez, Deputy Director, Spanish Speaking Unity Council

Mr. David Hoard, Oakland Community Development Agency

Mr. John Houlihan, former Mayor

Mr. Orra Hyde, Realtor, Coldwell Banker

Mr. Michael Kaplan, City Architectural Department

Dr. Clermont Lacey, Vice Chancellor, Peralta College District

Mr. Norman Lind, City Planning Department

Mr. N. Nakamura, Architect

Mr. Dale O'Dell, Project Director, Oakland City Center Project

Mr. Dene Ogden, Appraiser, Oakland, California

Mr. John Reading, former Mayor

Mrs. Mary Widener, Executive Director, Neighborhood Housing Services

Mr. Edward Zwolenkiewiez

Richmond

Mr. Booker T. Anderson, Minister

Mr. Nathaniel Bates, former Mayor, City of Richmond

Mr. Kenneth Besendt, Manager, Central Bank

Mr. Warren Brown, Publisher, Richmond Independent

Mr. Lance Burris, Director, Richmond Redevelopment Agency

Mr. Charles Coleman, Director of Western Program Services,
Social Security Administration, Richmond

Mr. Richard Danker, Traffic Engineer

Mr. William Evans, Management Service Corp.

Mr. Charles Harris, Real Estate Broker

Mr. Tom Hirschfeld, Chief of Planning & Operations, Richmond
Redevelopment

Mr. John Horton, Executive Vice President, Richmond Chamber
of Commerce

Mr. Jim Kimoto, Richmond Redevelopment Agency

Mr. Kirby, General Service Administration
Mr. John C. Marziano, Realtor, Pacific Bay Real Estate
Mr. Ed McKeegan, former Mayor, City of Richmond
Mr. James McMillan, Pharmacist
Mr. Paul C. Peterson, Whitecliff Homes
Mr. Forrest Simoni, former City Manager
Mr. Chuck Woodward, Director, City Planning Department

Walnut Creek

Mr. J. de Leau, Executive Vice President, Walnut Creek
Chamber of Commerce
Mr. Les Foley, Redevelopment Coordinator, City of Walnut
Creek
Mr. Paul Huey, Executive Vice President, Contra Costa County
Development Association
Mr. Norm Meltzer, Integrand
Mr. Mike Rosenquist, Assoc. Planner, Walnut Creek Community
Development Department
Mr. Dan Smith, Traffic Engineer
Mr. Robert Stevens, Realtor
Mr. Hal Thomas, Systech, Walnut Creek

Fremont

Mr. Stanley Allan, Executive Vice President, Fremont Chamber
Of Commerce
Mr. David Baker, Planner, City of Fremont
Mr. Robert Carlson, Senior Planner, City Planning Department
Mr. Dan Clap, Realtor
Mr. Donald Dillon, former Mayor

Mr. Bruce Dotson, Assoc. Planner, Fremont City Planning

Mr. Herb Epstein, Director of Economic Development, Fremont

Mr. Carl Flegal, former Mayor

Mr. Frank Hagerty, merchant Fremont Hub

Mr. Morris Marks

Mr. Robert Neil, Fremont Fashion Center

Mr. Ray Potter, former Planning Director

Mr. Joe Rondeau, Manager, Economic Development, Fremont
Chamber of Commerce

Mr. Angelo Siracusa, Executive Director, Bay Area Council



